VOCABULARY

AND

TABLES

OF THE

OLD AND NEW NOMENCLATURES

OF THE NAMES OF ALL THE SUBJECTS OF

CHEMICAL SCIENCE:

THE

OLD NOMENCLATURE

Being that which was employed by Chemifts in general, before the Difcoveries of the late M. LAVOISIER:

THE

NEW NOMENCLATURE

Being that which was invented by the joint labours of MESSRS. DE MORVEAU, LAVOISIER, BERTHOLLET, and FOURCROY, in 1787.

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1796.

A

DISCOURSE

ON

MODERN CHEMISTRY *in General, and on its* FIRST PRINCIPLES.

IN tracing the hiſtory of chemiſtry for theſe laſt twenty years, we find, that, in conſequence of the diſcovery of the different elaſtic fluids, and their properties, Stahl's theory has loſt much of its credit: Chemiſts have been for ſome time in doubt, whether to reject or adhere to it, and have formed various theories,—the number of which is ſcarce inferior to that of thoſe who are ſeriouſly engaged in the purſuits of this ſcience. A good many chemiſts. however, eſpecially in the north, have not yet adopted any new theory, but continue to connect the theory of Phlogiſton with the newly diſcovered facts. But thoſe who are maſters of the ſcience in all its extent, muſt readily perceive, that the manner in which that connection is formed, is far from being natural or ſatisfactory; and that it conſiſts of forced analogies, the inconſiſtency of which is ſufficiently ſtriking.

The doctrine adopted by ſeveral French chemiſts, at the head of whom we muſt rank M. Lavoiſier, who con-

trived and laid the foundations of this system, is not subject to the same difficulties. Its simplicity, its systematic progress, its perspicuity, and the ease with which it is applicable to all the phenomena of chemistry, render it much superior to any of those which still divide such of the philosophers of Europe as have not adopted it. Among the more celebrated of its partisans, this doctrine now boasts of the names of Lagrange, la Place, Black, Kirwan, Van Marum, Bertholet, Monge, Morveau, Chaptal, Charles, Landriani, Schurer, Girtanner, Jacquin the son, Arezula, &c. &c. I have taught this doctrine both in my public and private lectures for these last twelve years. If I might flatter myself with having contributed in any degree to elucidate this system of modern chemical science, either by my lectures and writings, or by such discoveries as I have published within these fifteen years, I must be permitted to observe, that no other theory affords so true and full an explanation of all the phenomena of nature and of the arts. This doctrine has been particularly explained through the whole of this work: But perhaps a short view of it may still be of use to the student; and I have therefore endeavoured to exhibit, in the following Discourse, a brief account of the principles on which it is founded; which may render it more striking, and more easily intelligible, and which will accordingly be a sort of abstract of all the leading phenomena, to which the others may be referred as to so many general heads.

In all chemical experiments, one of the two following phenomena is observed: 1. Heat is either disengaged

gaged or fixed: 2. An elastic fluid is either formed or absorbed. After these two general facts are established as invariably certain, it may be naturally conceived, that the properties and action of heat, with the formation and fixation of elastic fluids, are the foundation of the theory of chemistry. These, therefore, are the two great objects which must here engage our attention.

Of Heat, and of the Formation and Fixation of Elastic Fluids.

Although the weight, both of sensible heat, and of combined or latent heat, which we have denominated *caloric*, is at present unknown, and cannot therefore afford any proof of its material or individual existence, yet the whole phenomena of chemistry concur to prove, that it exists as a separate body or substance, possesses certain unvarying properties or characteristics, and is uniformly subject to certain laws of affinity, Besides its power to produce, by its action on our organs, that sensation which we denominate *heat*, philosophers have observed it to possess certain distinctive properties which can belong to no other substance, such as rarefaction, or the separation which heat produces of the component particles of all natural bodies; which, by increasing their bulk, diminishes their reciprocal attraction, and, without enlarging the mass, diminishes, in the same proportion, their specific gravity, and strengthens the affinities between the component particles of different bo-

dies. The greater the quantity of caloric accumulated in any body, the more it is compressed and condensed in that body; so much the more is its affinity for that body increased; and in the same proportion too, are the properties of the body changed. Fusion or liquefaction, volatilization or sublimation, the passage of liquids into the form of vapours or elastic fluids, —are effects constantly produced by the penetration of heat into those bodies, or rather by its combination with them. Ice, or water in a solid state, becomes fluid by absorbing a certain quantity of caloric: A larger proportion of the same principle renders it invisible and aëriform. There can be no doubt, that water in a liquid state is a compound of ice with a certain quantity of caloric, and that water in gas or vapour, is equally a compound, of which the principles are the same, but which contains caloric in a larger proportion. Such is the theory of the formation of elastic fluids in general: They are all compounds, consisting of a base more or less solid, and matter of heat or caloric. As this last principle is subject to laws of attraction peculiar to itself; when it escapes from one body, it combines with some other:—or rather, bodies with which caloric is combined, when they have a stronger attraction for other bodies exhibited to them than for this principle, dismiss it, in order to combine with those other bodies.

There is not a single instance in which these phenomena of the disengagement or fixation of caloric, and the disengagement or fixation of elastic fluids are not observed, either separately or together. From this simple theory,

theory, which is in reality nothing but a ſtatement of facts, it appears that all elaſtic fluids ought to be diſtinguiſhed by two names; one denoting their aëriform combination with caloric,—of which ſort are the generic words, *air*, or *gas*, the firſt to be uſed when thoſe ſubſtances are proper for maintaining combuſtion and reſpiration, the ſecond when they do not contribute to theſe purpoſes; the other, a ſpecific name, denoting the particular baſe of the gas or elaſtic fluid. It will accordingly be expected, that, in a recapitulation of all the facts of chemiſtry, we ſhould give an account of the elaſtic fluids which are either produced and diſengaged, or fixed and abſorbed in the various phenomena belonging to this ſcience.

All the elaſtic fluids whoſe properties are worthy of notice, may be arranged in four claſſes.

Class I.

Elaſtic Fluids capable of maintaining Combuſtion, and the Reſpiration of Animals.

Species 1. Vital air.
2. Atmoſpheric air.

Class II.

Elaſtic Fluids unfit for maintaining Combuſtion and Reſpiration, and neither ſaline nor ſoluble in Water.

Species 3. Azotic gas.
4. Nitrous gas.

Class III.

Elastic Fluids unfit for maintaining Combustion and Respiration, but of a saline Nature, and soluble in water.

Species 5. Carbonic acid gas.
6. Sulphureous acid gas.
7. Fluoric acid gas.
8. Muriatic acid gas.
9. Oxigenated muriatic acid gas.
10. Ammoniac gas.

Class IV.

Elastic Fluids neither proper for maintaining Combustion, nor Respiration, but inflammable.

Species 11. Hydrogenous gas.
12. Sulphurated hydrogenous gas.
13. Phosphorated hydrogenous gas.
14. Hydrogenous gas mixed with azote.
15. Hydrogenous gas mixed with carbonic acid.
16. Carbonaceous hydrogenous gas.

Of the Nature and leading Properties of these different Species of Elastic Fluids.

I. *VITAL AIR*, called by its discoverer, Dr Priestley, *dephlogisticated air*, and by some other English philosophers, *empyreal air*. and *principium sorbile*, is at present

present extracted from many different matters. *Precipitate per se*, or oxide of mercury, *red precipitate* or oxide of mercury prepared by nitric acid, precipitates of the several mercurial neutral salts formed by alkalis, red oxide of lead sprinkled with a little nitric acid, alkaline and terrene nitrates, nitrate of silver, native oxide of manganese either by itself or sprinkled with sulphuric acid, oxigenated muriatic acid, mercurial acetite, arseniate of zink, all give out either more or less of it when exposed to the action of light and heat. Its disengagement is evidently effected by the uniform action of these two principles. It is not contained ready formed in these bodies: they contain only its solid base, which is melted by caloric and light, and thus reduced into an elastic-fluid state; and as it escapes, the oxides by degrees assume the metallic state. It is also obtained from the leaves of plants or trees exposed in water charged with carbonic acid to the action of the rays of the sun.

Vital air is often mixed with a little azotic gas; only, that obtained from oxide of mercury, from oxide of manganese, from super-oxigenated muriate of potash, or from the leaves of plants, is without it.

Vital air is rather heavier than atmospheric air; it is the only elastic fluid which maintains combustion. Pure vital air is four times as powerful for this effect as atmospheric air; that is to say, a body requiring four cubic feet of atmospheric air to effect its combustion, may be burnt with one cubic foot of vital air. Combustion is accompanied with a good deal of light and heat: these two phenomena are occasioned by the rapid separation of the fire, which forsakes the base of

this air in proportion as that base fixes in the burning body. In some instances of combustion effected by this air, only heat, but no light, is disengaged. This happens when the disengagement is accomplished slowly and by degrees. It contributes also in an eminent manner to the respiration of animals: and supplies their blood with the caloric which raises its temperature above the medium in which they live.

The base of vital air, by combination with carbone, sulphur, phosphorus, azote, arsenic, &c. forms the carbonic, sulphuric, phosphoric, nitric, arsenic, &c. acids. It is from its possessing this property, that we have denominated this base oxigene, or the acidifying principle. It is to be observed, 1. That these combinations do not always take place when those combustible bodies are immersed in vital air; and that different degrees of temperature, above the ordinary temperature of the atmosphere, are generally requisite to produce them, at least with sufficient rapidity. 2. That this base or oxigene enters into these compounds in different proportions; and that, according as any base is more or less completely saturated, the compound differs in its nature from other compounds not saturated precisely in the same degree. 3. That its affinity for these different matters is not uniformly the same: accordingly, phosphorus robs the arsenic acid of its oxigene; the phosphoric acid, again, yields its oxigene to coal, &c. 4. That when it passes out of one of those bodies in which it has been fixed in a state very different from that of elastic fluidity, into any other body, a sort of combustion actually takes place; which is indeed slow, and therefore unaccompanied

nied with either heat or light; as oxigene, in the ſtate in which it exiſts in ſuch bodies, is combined with but very little of thoſe principles.

Oxigene combined with hydrogene, forms water; with metals, it forms metallic oxides. Coal decompoſes water and metallic oxides at a high temperature; having then a greater affinity with oxigene, than either hydrogene or metals.

Vital air diſcolours vegetable and animal ſubſtances: When abſorbed by fixed oils, it thickens them, and reduces them into a ſtate reſembling that of wax. With the muriatic and the acetous acids, it forms oxigenated muriatic acid and acetic acid or radical vinegar.

The heat of the ſun, when acting with any conſiderable energy, diſengages oxigene into the ſtate of vital air from many of its combinations; ſuch as the oxides of mercury, ſilver, gold, nitric acid, oxigenated muriatic acid, &c.

II. *Atmoſpheric* or *common air* is a compound of vital air with azotic gas. One hundred parts of atmoſpheric air, contain nearly 73 parts of azotic gas and 27 parts of vital air. This explains the reaſon why only a fourth part of any quantity of atmoſpheric air is conſumed before it becomes unfit for maintaining combuſtion; and why the phenomenon of combuſtion takes place more ſlowly, and is accompanied with leſs heat and light in atmoſpheric, than in pure vital air. But we muſt obſerve, that there is not perhaps a ſingle inſtance of combuſtion, in which the 27 parts of vital air contained in the common air of the atmoſphere, are entirely abſorbed and fixed in the combuſtible body; and that accordingly the

aëriform

aëriform residue of atmospheric air remaining after it has contributed to combustion, is scarce ever pure azotic gas, not even when the burnt body remains in a fixed and solid state, without mixing with the elastic fluid. The gas must therefore be still more impure, when the body is burnt under a bell-glass filled with atmospheric air, and affords a residue in a permanent aëriform state; as charcoal, and all organic matters containing it, do.

There are a number of bodies which alter atmospheric air, by absorbing the vital air which it contains. But we know of none that renew and purify it, except the leaves of vegetables; which, when exposed to the rays of the sun, effect a decomposition of carbonic acid and water, in consequence of which, they afford a supply of vital air to the atmosphere.

III. *Azotic gas*, which exists in the atmosphere in a large proportion, is thus named, because it very soon proves fatal to animals, and extinguishes combustion; and accordingly, appears to be in its nature directly opposite to vital air. Dr Priestly called this elastic fluid *phlogisticated air;* imagining that it derived its noxious properties from phlogistion, disengaged out of burning bodies, or odorate matters;—in a word, from all those operations of nature and art, which he has called *phlogisticating processes.*—It has since been proved, that this fluid exists ready formed in the atmosphere, and is only separated by the absorption of vital air. Modern philosophers have made more important discoveries concerning this, than concerning any other elastic fluid. There are several ways of obtaining pure azotic gas. That which is most generally in use, is the exposing of a quan-

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tity of liquid sulphure of potash to a given quantity of atmospheric air under bell-glasses: the vital air is by degrees absorbed; and when *it* is entirely absorbed, the azotic gas remains pure. We owe this process to Scheele. M. Berthollet has discovered, that it may also be obtained, by treating muscular flesh, or the fibrous part of the blood, after having washed it well, with nitric acid, in an apparatus suitable for collecting and preserving gases: but these animal matters, when used for this purpose, must be perfectly fresh: if altered, they afford, together with the azotic gas, a mixture of carbonic acid. I myself have discovered, that the air-bladder of the carp, which Dr Priestly had before observed to contain noxious air, is full of this fluid, which may be obtained simply by bursting them under bell-glasses filled with water.

Azotic gas is lighter than atmospheric air. It instantly extinguishes burning tapers; and acts, with great rapidity and energy, in destroying the life of animals immersed into it. When mixed with vital air, in the proportion of 73 to 27, it affords factitious atmospheric air: in a larger proportion, it forms an air noxious to animals. Neither water, nor earths, nor acids, are known to act upon this gas: It appears, however, that it is liable to be absorbed by the nitric acid, which renders it ruddy. Mr Cavendish has discovered, that three parts of azotic gas, mixed in glasses with seven parts of vital air, and exposed to the action of the electric spark, are by degrees condensed, so as to form the nitric acid: Hence the theory of the formation of this acid in the atmosphere. M. Berthollet has found, that ammoniac is decomposed by hot nitric acid, by oxigenated muriatic acid, and by the detonation of fulminating gold. He has discovered,

that

that ammoniac consists of five parts by weight of azote, and one of hydrogene. He has farther discovered, that animal matters contain a great deal of azote, that the ammoniac obtained from them by the action of fire and putrefaction, is formed by the union of that azote with hydrogene,—and that plants, which afford this same salt by distillation, afford it in consequence of their containing azote, and therefore well deserve the name of *animal plants*, which has been given them by some chemists. I have since satisfied myself by experiment, 1. That of all animal matters, the fibrous part affords the most azotic gas by nitric acid; 2. That after putrefaction, it contains no more azote, but affords then a considerable quantity of ammoniac. 3. That several vegetable matters, in particular the gluten of farina, elastic gum, green fecula, and ligneous matter, furnish azotic gas by the action of the nitric acid.

These remarkable qualities of azotic gas, are particularly worthy the attention of the physician. They contribute to explain the difference between animal and vegetable matters, the formation of ammoniac, putrefaction, and the production of the nitric acid from putrid animal matters.

As this elastic fluid has been by some people confounded with carbonic acid, it is to be remembered, that azotic gas has no sensible taste,—is much lighter than that aëriform acid, and neither reddens tincture of turnsole, nor precipitates lime-water.

IV. *Nitrous gas* was in some measure known to Hales; but Dr Priestley is properly the discoverer of it. This elastic

elaſtic fluid is diſengaged from nitric acid by the action of a great number of combuſtible bodies, eſpecially metals, oils, mucilages, and alcohol. It extinguiſhes lights; it deſtroy animals; it is neither acid nor alkaline; it is not liable to be altered by pure water. By combination with vital air, it affords nitric acid; being itſelf nothing but nitric acid, deprived of a part of its oxigene, and conſequently a compound of azote and oxigene,—only, containing more azote and leſs oxigene than the nitric acid. Hence the varieties of this gas, according as azote and vital air are mixed in it in different proportions; and hence the uncertainty of its effects as an eudiometer. From this we underſtand, why, in ſeveral inſtances,—eſpecially when, in order to obtain nitrous gas, we uſe a body very greedy of oxigene, and requiring a conſiderable quantity of oxigene to ſaturate it,—the nitrous gas obtained, contains naked azotic gas; and even, ſometimes, nothing is obtained but azotic gas. This nitrous gas, which is formed of azote and oxigene, contains a larger proportion of the oxigene than atmoſpheric air does. Of this a proof is obtained by decompoſing it by an alkaline ſulphure in ſolution. A ſolution of ſulphure of potaſh, when put into a glaſs filled with nitrous gas, immediately abſorbs a part of the gas: In a ſhort time, the gas is no longer reddened by the contact of air, and becomes fit for maintaining combuſtion, even better than atmoſpheric air. It is actually converted into air, ſomewhat purer than the air of the atmoſphere, or containing a larger proportion of vital air than atmoſpheric air uſually contains: But if more nitrous gas be added, and the action of the ſulphur ſtill continued, the whole of the vital air

is ſoon abſorbed, and what remains is nothing but azotic gas. We may farther obſerve, that nitrous gas communicates to flame a green colour, before extinguiſhing it; and that, in many inſtances this colour is produced by compounds, of which azote forms a part.

Theſe leading properties of nitrous gas, particularly the rapidity of its combination with vital air, ſhew, that it bears an analogy to combuſtible bodies; and it has been obſerved by Macquer, that the artificial formation of nitrous acid by the mixture of theſe two gaſes, is a ſpecies of combuſtion; but as it is not accompanied with flame, I have not ventured to rank nitrous gas among the inflammable gaſes. It differs from atmoſpheric air in the proportion of its principles, and in their ſtate of compreſſion. In nitrous gas, the oxigene and azote are deprived of all that quantity of caloric and light which they poſſeſſed in the atmoſphere. The oxigene, however, ſtill retains enough of both theſe principles to occaſion a combuſtion, with flame, of ſeveral combuſtible bodies, when immerſed in it, as pyrophorus, &c.

V. *Carbonic acid gas* was known before any of the other elaſtic fluids. Dr Black diſcovered its exiſtence in chalk and alkalis; and at the ſame time ſhewed, that it rendered thoſe matters efferveſcent, mild, and ſuſceptible of cryſtallization; and that, when deprived of it, alkaline matters become acrid and cauſtic, and are no longer liable to efferveſce, &c. This gas exiſts in the atmoſphere, of which it compoſes nearly one two-hundredth part; in acidulous waters, and in ſome ſubterraneous cavities, ſuch as the *Grotto del Cano*, &c. It is nearly

nearly twice as heavy as atmospheric air; its smell is pungent, and its taste acrid; it extinguishes burning bodies,—kills animals,—reddens tincture of turnsole,—precipitates lime-water,—renders chalk soluble in water,—forms, with all alkaline matters, carbonates, a sort of crystallizable neutral salt, in which the properties of the alkali are still discernible, on account of the weakness of the acid. This acid gas, which acts an important part in the phenomena of nature and art, is a compound of carbone and oxigene; of carbone, in the proportion of twenty-eight hundred parts,—and oxigene, in the proportion of seventy-two hundredth parts. As carbone, of all known bodies, appears to have the strongest affinity for oxigene, the carbonic acid is among those compounds, of which the decomposition is the most difficult, and one of the products the most frequently obtained in chemical analyses. It is formed in all instances in which bodies containing oxigene are heated with coal; as in the reduction of metallic oxides by oils,—by coal itself, &c.—by the decomposition of organic matters containing coal and water, &c.

VI. *Sulphureous acid gas* is obtained, either by the slow combustion of sulphure, or by abstracting from sulphuric acid a part of its oxigene; and is a compound of sulphure with oxigene, containing the latter principle in a more scanty proportion than sulphuric acid. This gas has a sulphureous smell, acrid and pungent, and a very sour taste; it extinguishes burning bodies, and kills animals: Intense cold condenses it into a liquid state: It reddens and discolours most vegetable blue colours: it combines with water and with ice, and melts the lat-

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ter of these substances by means of the heat which it gives out as it becomes fixed: it absorbs, by degrees oxigene from the atmosphere; and in consequence of that, passes into the state of sulphuric acid.

VII. *Fluoric acid gas* is disengaged from native fluate of lime, or *vitreous spar*, by sulphuric acid. Its smell and taste are very strong: it dissolves siliceous earth, and holds it suspended in an aëriform invisible state. The contact of water, by fixing it, separates a portion of that earth: Alkalis separate it entirely. The nature of this acid gas is unknown; and if it be like most other mineral acids, a compound, consisting of a simple acidifiable base with oxigene, its acidifiable radical principle must have a very strong affiuity with oxigene; for even coal is not able to decompose this gas, by detaching that principle.

VIII. *Muriatic acid gas* is nothing but muriatic acid purified from water, and melted by caloric into an elastic fluid. Its smell, which is lively and suffocating,—its taste, which is very strong,—its solubility in cold water, which readily absorbs it, and separates the heat by which it was maintained in a state of elastic fluidity,—the peculiar neutral salts which it forms with terrene and alkaline bases,—and the white vapour which is observed whenever it comes into contact with water dissolved in the atmosphere,—are its distinguishing characteristics. Its intimate nature, or component principles, are unknown; its acidifiable base has undoubtedly a very strong affinity with oxigene, as these principles have never yet been separated. Nay, we are about

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to see, that this acid abstracts oxigene from various other bodies, when they are saturated with it.

IX. *Oxigenated muriatic acid gas* is disengaged with great facility during the reciprocal action of native oxide of manganese and muriatic acid. This peculiar gas is known to be produced by the transition of oxigene from the manganese into the muriatic acid. This gas always retains a colouring part, of a greenish yellow: Its smell is strong and pungent: It is not acid: It weakens and reddens the flame of a taper, but does not extinguish it: It is very quickly fatal to animals: It discolours stuffs, tincture of turnsole, and flowers, rendering them all white: It likewise discolours and whitens yellow wax, &c.: It decomposes ammoniac, which may now be used as a preservative against its noxious effects: the azotic gas of the ammoniac is separated, while the oxigene of the muriatic gas combines with its hydrogene to form water: It condenses fixed oils: It oxidates metals; and even mercury and gold are subject to its influence: It is soluble in water, and communicates to that fluid all its properties: The contact of light by degrees decomposes it, and reduces it into the state of pure muriatic acid.—The formation of oxigenated muriatic acid, and oxigenated muriatic acid gas, is one of the most remarkable discoveries of modern chemistry. This discovery shews, that the relations of muriatic acid to combustible bodies are directly contrary to those of the other acids. All the other acids appear to be decomposable by most of the metals, which have in general a stronger affinity with oxigene than the combustible bases of those acids have. The muriatic acid, on the con-

trary, is not decomposed by any metal: none of them detaches its oxigene; and in consequence of this, it carce acts on any of the metals. Its base which is still unknown, is not only intimately connected with the acidifying principle, but even detaches that principle from several other metallic oxides, such as those of mercury, lead, iron, &c. when saturated, it is no longer acid; as excess of oxigene destroys its acidity. The case is directly contrary with many other combustible bodies. Its excess of oxigene enables it to act upon metals, on which, in its ordinary state, it produces no change; such particularly, are antimony, silver, and gold. While these metals rob it of this excess of oxigene, they are by degrees burned, and dissolved in the muriatic acid, which returns itself into its original state. These oxidations and solutions of metals, by the oxigenated muriatic acid are accomplished without effervescence, in the same manner as a salt is dissolved in water; for the metal takes up the superabundant oxigene of the liquid acid quietly, and with much more ease than if it were obliged to disengage it from a combustible base. Oxigenated muriatic acid likewise dissolves metallic oxides, and thereby forms oxigenated muriates, very different in their nature from simple muriates. The most striking and most remarkable of these differences appears in the combinations of the acid, in its different states with oxide of mercury. With oxigenated muriatic acid, oxide of mercury forms *corrosive sublimate*. With simple muriatic acid, the same oxide forms *mild mercury*. The differences between these two salts are therefore owing to the differences between the two states of the acid in respect to the proportions of the

oxigene,

oxigene. The singular properties of the oxigenated muriatic acid render it extremely useful in several of the arts: some of which indeed owe their origin to it, as the bleaching of linen and cotton discovered by M. Berthollet.

X. *Ammoniac gas*, discovered by Dr Priestley, is disengaged by heat from liquid ammoniac, and, with still more rapidity, from a mixture of ammoniacal muriate, or common sal ammoniac, with quick-lime. This elastic fluid, when collected in glasses over mercury, is found to be a little heavier than atmospheric air. The degree of cold or pressure at which it loses its aëriform fluidity, is still undetermined. It combines with water, giving out, while the combination takes place, a good deal of heat: it melts ice: it renders syrup of violets, as well as blue and red flowers, green: it combines rapidly with carbonic, sulphureous, and muriatic acid gases; these combinations produce a good deal of heat: as this heat is disengaged from the two elastic fluids, these become solid while the combinations are forming.

Ammoniac gas is speedily decomposed by the contact of oxigenated muriatic acid gas: the decomposition is accompanied by heat: a quantity of water, charged with muriatic acid, is formed, and there is a residue of azotic gas. This experiment, as well as several others which have been already mentioned, proves ammoniac to consist of hydrogene and azote. The decomposition of ammoniacal copper, and of *fulminating gold* and *silver*, which afford, by the action of fire, water, reduced metal, and azotic gas, is another proof that ammoniac gas consists of these principles; for, the hydrogene of this

alkali having a ſtronger affinity for oxigene than either gold or ſilver, detaches it from the oxides of theſe metals, and, leaving its azote to be diſengaged into a gazeous ſtate, forms water with the oxigene which it has acquired in this manner. The phenomena of this decompoſition of ammoniac by oxides are very much diverſified—from that which oxide of copper effects ſlowly, and with the aſſiſtance of a ſtrong heat,—to the amazing rapidity with which ammoniacal oxide of ſilver is reduced, when it detonates by the momentary contact of heat. The diverſity of theſe phenomena is owing to the various affinities of oxigene with the different metals.

Oxides of zinc and iron, which, in their metallic ſtate, decompoſe water, have not the ſame power over ammoniac; for theſe metals have a greater affinity with oxigene, than oxigene has with hydrogene. Hence it is eaſy to conceive, 1. how ammoniac is produced by the putrifaction of animal ſubſtances, and during the decompoſition of water and nitric acid by ſome metals, as tin. 2. How, in oppoſite circumſtances, when ammoniac is decompoſed by metallic oxides, the nitric acid comes to be formed.

XI. *Pure hydrogenous gas*, univerſally known by the name of *inflammable air*, is the lighteſt of all aëriform fluids: When very pure, it is thirteen or fourteen times lighter than atmoſpheric air. It extinguiſhes burning bodies: it kills animals: it is kindled by the contact of the electric ſpark, or of any flaming combuſtible body: it burns with a bright flame. Fifteen parts of this gas abſorb, in burning, eighty-five of vital air; and by that combuſtion

combustion, an hundred parts of very pure water are formed—if the elastic fluids be pure. The water is therefore a compound of these two bodies, deprived of most of the heat which is necessary to maintain them in the state of elastic fluidity. All substances having a stronger affinity with any one of these two principles, than that by which their union is maintained, decompose this fluid. Thus, iron, zinc, coal, and oil, decompose water, and separate hydrogene from it into a gazeous state; as they have a stronger affinity with the base of vital air or oxigene than it has with hydrogene. From this it is clear, that hydrogenous gas cannot be expected to decompose carbonic acid, or the oxides of zinc and iron: On the contrary, sulphur, and such metals as do not decompose water, give up the oxigene which they contain, in the state of sulphuric acid, and of metallic oxides, to hydrogenous gas: which reduces the former into the state of pure sulphur, and the latter into the state of metals. This decomposition of water by iron and zinc, is the cause from which proceeds the hydrogenous gas produced during the solution of these two metals by the sulphuric, the muriatic, the carbonic, or the acetous acid.

The leaves of vegetables, on the contrary, appear to possess the property of absorbing the hydrogene of water, and disengaging its oxigene into the state of pure air. Light contributes greatly to this decomposition; and without the contact of light it is never effected. It appears to serve for the purpose of melting oxigene, and thus forming it into vital air; and, while the oxigene is disengaged, the hydrogene becomes fixed in the vegetable, and serves, no doubt, for the produc-

tion of oil. We begin to perceive that hydrogene combines with carbone and a ſmall proportion of oxigene to form the oil of vegetables; and that theſe again decompoſe carbonic acid together with water, to abſorb the carbone of the firſt, and the hydrogene of the laſt of theſe compounds. Hydrogene, or the baſe of hydrogenous gas, forms ammoniac, by combination with azote, or the baſe of azotic gas. M. Berthollet, by analyſing that ſalt, has ſhewn this to be its compoſition: But we have not yet been able to form ammoniac by the immediate combination of theſe two principles.

We have never yet been able to ſeparate the matter of heat combined in hydrogenous gas, to which that gas owes its elaſtic fluidity, without fixing the hydrogene in ſome other compound; and therefore, we are ſtill unacquainted with hydrogene in a ſolitary inſulated ſtate. The degree of preſſure or cold neceſſary to effect this ſeparation, muſt be ſuch as we have not yet learned to apply: Every thing, indeed, concurs to ſhew, that either the one or the other muſt be in an extreme degree.

The ſudden diſengagement, and the rapid inflammation of hydrogenous gas, produce all the fulminations and detonations which are obſerved in chemiſtry. The inſtantaneous recompoſition of water is almoſt invariably the conſequence of theſe detonations.

Hydrogenous gas performs an important part in the phenomena of nature. A great quantity of it is produced and diſengaged in mines: It there reduces and colours various metallic oxides: it riſes in the atmoſphere, is carried about by the winds, and kindled by the electric ſpark: accordingly, it acts the part of thunder; and immediately upon its detonation,

a quantity of water is formed, which streams down upon the earth.

The inflammation of this gas by the electric spark, is one of the most remarkable phenomena in nature, and one of those of which the origin is least known. We are equally at a loss to explain, how the electric spark comes to be capable of fixing a mixture of vital air and azotic gas into nitric acid.

XII. Sulphurated hydrogenous gas, or *hepatic gas*, has been very well distinguished from other hepatic gases by Bergman. It is obtained from solid alkaline sulphures, or *livers of sulphur*, by decomposing them with acids in a pneumato-chemical apparatus. This aëriform fluid has a very fetid smell; it kills animals: it renders syrup of violets green: vital air precipitates sulphur from it; it is kindled by the electric spark, and by the contact of burning bodies: it burns with a reddish blue flame; and, as it burns, deposites sulphur on the sides of the vessels containing it: the ruddy nitrous acid, the sulphureous acid, and the oxigenated muriatic acid decompose it, destroy its elastic fluidity, and separate the sulphur. It combines with water, and the solution is decomposed by the action of air: sulphurated hydrogenous gas colours and reduces oxides of lead, bismuth, &c.; it precipitates solutions of metals. Some metals, particularly mercury and silver, separate the sulphur; accordingly, when passed through glasses containing mercury, a great part of it is decomposed.

All these phenomena agree in shewing, that this gas contains sulphur in a very attenuated state. M. Gengembre, by an analysis, has discovered it to consist of

hydrogenous gas and ſulphur: to the ſolution or ſuſpenſion of ſulphur, it owes its diſtinguiſhing characteriſtics. The ſulphur, however much attenuated, does not burn at the ſame time with the hydrogenous gas, but is in part depoſited during the combuſtion of the gas: The cauſe of this phenomenon is, that hydrogenous gas does not need combuſtion of ſo high a temperature as ſulphur.

It is ſulphurated hydrogenous gas which mineraliſes ſulphureous waters. On this account, the common acids never precipitate ſulphur from thoſe waters; but the nitrous acid, the ſulphureous acid, and the oxigenated muriatic acid, in which the oxigene is not very intimately combined with the acidifiable baſe, ſeparate the ſulphur by abſorbing the hydrogene. If too much of any of theſe acids be employed, eſpecially of the oxigenated muriatic acid, the ſulphur of this gas will be burned, and converted into ſulphuric acid; and then no precipitate will appear.

Our acquaintance with ſulphurated hydrogenous gas enables us to explain ſeveral things concerning ſulphur, which we were before unable to account for. 1. We know now, why ſolid ſulphures, recently prepared, are without ſmell; and what occaſions their becoming ſo ſtrongly fetid, when moiſtened: 2. It appears that water, though not decompoſable by ſulphur alone, is eaſily decompoſed by the joint action of ſulphur and alkaline matters: 3. We underſtand fully, how alkaline ſulphures come to be decompoſed by the air, and by ſeveral metallic oxides, eſpecially by the oxides of metals which do not decompoſe water: 4. The theory of ſulphureous mineral waters is now eaſy to explain; as well as the hiſtory of their decompoſition by air and metallic oxides; and the difficulties which were formerly found

In all attempts to detect the sulphur by simple acids, while it was not suspected to exist in those waters in any other state but sulphure or *hepar*.

XIII. *Phosphorated hydrogenous gas* was discovered by M. Gengembre, who called it at the first, *phosphoric gas*. He obtained it, by boiling a lixivium of caustic potash with half its weight of phosphorus, and receiving the elastic fluid that was disengaged, into glasses containing mercury. It kindles by the mere contact of air, producing as it takes fire, a faint explosion. The solid phosphoric acid which it affords, forms, when burning, a sort of *corona* in the air, when not agitated; and towards its extremity, the diameter of the flame does not diminish, but is enlarged. When mixed with vital air under glasses, it burns with the greatest rapidity, and produces such heat and dilatation that the glasses burst if they be not very thick, or if the proportions of the mixture be too large. M. Gengembre has shown, that this new gas is a solution of phosphorus and hydrogenous gas. It bears a considerable resemblance to sulphurated hydrogenous gas; and differs from it in nothing but the nature of the combustible body suspended in the hydrogenous gas. As phosphorus is much more combustible than sulphur, phosphoric hydrogenous gas kindles in the air: the phosphorus is first kindled, and communicates the inflammation to the hydrogenous gas, which is heated by its combustion. In sulphurated hydrogenous gas, on the contrary, the hydrogenous gas is kindled only by the contact of some burning body; and the sulphur not being sufficiently heated, is separated unburnt.

XIV. *Hydrogenous gas*, mixed with azotic gas, forms that

that elastic fluid which M. Volta has denominated *inflammable air of marshes*. It is produced by the putrefaction of some vegetable matters, and of all animal substances. It is disengaged from waters in marshes, ponds, houses of office, and all places where there are animal matters putrefying in water. It either accompanies, precedes, or follows the formation of ammoniac which takes place in putrefaction. I take it to be a simple mixture of which the component parts are not united by combination; for, were they actually combined, the result would be ammoniac: but it differs from ammoniac, 1. In the elastic state of the two fluids of which it consists; 2. In the proportions of those elastic fluids, which vary in this mixed acid, but in ammoniac are always the same. We are indebted for our present accurate knowledge of this gas to M. Berthollet. In the years 1778 and 1779, I examined the inflammable gas of marshes, and discovered it to contain carbonic acid: but in several of those gases, found in different parts of the neighbourhood of Paris, I found a mixture, the nature of which I did not properly distinguish; although I asserted, as may may be seen in the 164th page of the collection of my Memoirs in 8vo, that it is sometimes accompanied, or even has its place supplied by *phlogisticated gas*, which, as I have elsewhere shewn, is the same with what we at present call azotic gas. These were merely vague assertions at the time when I inserted them in my Memoirs: but M. Berthollet has since communicated to them a degree of certainty and precision which induces me to distinguish this gas by the peculiar names above given to it.

Hydrogenous gas, mixed with azotic gas, burns with a blue flame. It detonizes, but not easily, with vital air. When

When caused to detonize, in M. Volta's eudiometer, it is found to produce some drops of water, and a residue more or less pure.

XV. I distinguish, by the title of *hydrogenous gas* mixed with carbonic acid, that gas which is obtained by distillation from many vegetable matters, particularly from tartar, and all tartareous salts; from acetous salts; from hard wood; from charcoal burning with the help of water; from mineral coal, &c.

It does not burn very readily; but it is not absolutely incombustible, even though three fourths of its bulk be carbonic acid. This acid is separated from it, and the hydrogenous gas purified by lime-water and caustic alkalis. It is a simple mixture, without combination. Hydrogenous gas is not capable of decomposing carbonic acid; for coal decomposes water, having a stronger affinity than hydrogene for its oxigene.

XVI. *Lastly*, It is now known that coal, though very much fixed in close vessels, and in our common fires, is liable to be redued to vapour, and dissolved into elastic fluids, in a very high temperature. Hydrogenous gas acts with more energy then any other substance in dissolving carbone, and maintaining it in suspension; it frequently therefore carries it with it, as it assumes an elastic fluid form. It is this mixed gas that is disengaged, when cast iron and steel are dissolved in sulphureous acid diluted in water. In consequence of the former having absorbed carbonaceous matter in the tops of the furnaces, and the latter in its cementation, it even appears that coal may be directly dissolved in hydrogenous gas, by

by directing the rays of the sun from the focus of a mirror, through the middle of a glass filled with this gas, upon coal placed on mercury in the bottom of the glass. This fluid burns with a blue flame; and gives out during its combustion, small white or reddish sparks. The existence of coal in solution in this gas, appears from its gravity, and from its combustion in vital air, which produces carbonic acid. It likewise appears, that coal communicates to hydrogenous gas its well-known fetid smell, or at least it renders that smell stronger. Lastly, coal modifies the effects of this gas, and changes the results of its combinations. Thus, a mixed gas, formed by the solution of coal in azotic gas, seems to be the colouring matter of Prussian blue. But we are not yet acquainted with all the compounds into which coal enters: and the same is to be said of the various mixtures of all the gases with one another, which certainly take place in a great many instances, but of which chemistry has not yet estimated the effects.

Of the Application of the Facts which have been collected, concerning the Nature and Properties of Elastic Fluids, to the great Chemical Phenomena produced by Nature and Art.

It is now acknowledged as an unquestionable fact, that there is perhaps not a single phenomenon in chemistry in which some elastic fluid is not either disengaged or fixed; nay, sometimes both the disengagement and fixation of elastic fluids take place on the same occasion: and the discoveries of the moderns have proved, that the manner in which such phenomena were formerly ac-

counted

counted for, neither explained the causes, nor gave a just view of the effects. The perspicuity which these discoveries have introduced into this part of the science, is a sufficient proof of their importance.

On comparing the numerous facts which constitute the present system of chemical knowledge, it appears that they may be reduced to a few general classes, containing them all under distinct heads. Such an arrangement is the more necessary, as it shows the connections and mutual relations of those facts; and must form, of consequence, the elements of the science of chemistry. But this last object cannot be attained, till all the general phenomena be explained: and as we are still unable to account for a number of these, as I am about to show, this method of laying down the elements of chemistry is to be considered in no other light than as a proposal, the importance and utility of which render it worthy the attention of philosophers.

It is with a view to contribute in part to the carrying of this project into execution, or at least to show that it is not impossible, that I have attempted to reduce all the facts, and the whole theory of chemistry, under fourteen leading phenomena, comprehending the various changes which natural bodies are liable to suffer from the action of the chemical affinities. In order to proceed regularly from simple to compound, in explaining these phenomena, I arrange them in the following order:

1. The absorption or disengagement of caloric, and the production or diminution of heat, with the effects of both.

2. The

2. The influence of air on combustion, and the general nature of combustible bodies.

3. The effects produced by light on bodies.

4. The decomposition and the recomposition of water.

5. The production and the decomposition of earths.

6. The formation and the decomposition of alkalis.

7. Acidification; the formation and decomposition of acids; the nature of these salts, their differences, their analogies, their action on most bodies, &c.

8. The combinations of acids with earths and alkalis.

9. The oxidation and the reduction of metals.

10. The solution of metals by acids.

11. The formation of the immediate principles of vegetables by vegetation.

12. The several sorts of fermentation.

13. The formation of animal matters by the life of animals.

14. The decomposition and putrefaction of animal matters.

Let us briefly consider each of these phenomena, and explain their essential relation to the properties of elastic fluids.

I. *The production of heat* or disengagement of caloric, is owing either to the force of pressure, which disengages it from bodies in which it is contained,—or to combination, which disengages it in like manner. It is to be observed, that this phenomenon takes place more especially when an elastic fluid is fixed in any body; because, as we have already seen, the aëriform state of any substance supposes the presence of a good deal of combined

combined heat. It is alſo to be obſerved, that as every different body contains a different quantity of heat, or, in other words, different bodies have different capacities of heat,—therefore preſſure or combination muſt produce, from different bodies, very different quantities of this ſubſtance. For which reaſon, this phenomenon, which accompanies a great part of the operations of chemiſtry, ſhould be obſerved and eſtimated with the utmoſt care, in experiments in which accuracy is intended. Similar to this, is the manner in which the apparent deſtruction of heat or *abſorption of caloric* takes place, which is likewiſe very often obſerved in chemical proceſſes. It always depends on the increaſe of the bulk of bodies, and on their then acquiring a greater capacity for the reception of caloric. Both of theſe phenomena, therefore, may be eſtimated mechanically, or merely by obſerving how the particles of bodies are compreſſed together, or removed from each other. But in order to form a more juſt idea of it, we muſt add to this mechanical cauſe, the conſideration of the particular chemical attraction or affinity between heat and the body on which we are obſerving its operation. The moderns have made a great many diſcoveries reſpecting the influence of caloric in combinations and decompoſitions.

II. Combuſtion is one of the moſt important phenomena in nature. We may diſtinguiſh two diſtinct claſſes of combuſtions,—thoſe which take place in the air, and thoſe which take place apparently without the contact of vital air, but on ſubſtances containing its baſe.

Combuſtions

Combuſtions effected by the contact of air, are, as has been already ſaid, combinations of the combuſtible body with the baſe of vital air or oxigene. In proportion as theſe combinations take place, the matter of light and caloric are ſeparated from the oxigene, and appear in the form of ſenſible heat and light. There are ſome combuſtible bodies which diſengage theſe fluids ſlowly from vital air, and afford only little heat when they burn: others, again, diſengage theſe principles rapidly, and cauſe them to appear in the form of ſparkling light, and glowing heat. By communicating more or leſs oſcillation to this light, they give it different ſhades of colouring; if, with Euler, we conſider different coloured rays of light as being all the ſame matter, only actuated by different oſcillations, ſimilar to the vibrations of ſound. In certain combuſtions effected by air, the combuſtible bodies have ſo great an affinity to the baſe of the elaſtic fluid, that they attract it with the utmoſt facility; others require, in order to their combination with oxigene, a temperature ſometimes exceedingly high, which appears to promote the attractive influence of the combuſtible body on that baſe. This theory accounts for the increaſe of the weight of a burnt body; the change of its ſtate; the impurity of atmoſpheric air after combuſtion,—for the proportion of azotic gas then becomes much larger,—and the diverſity of the phenomena, ſuch as flame, heat, and rarefaction, which accompany every ſpecies of combuſtion which is effected in the atmoſphere.

The ſecond claſs of combuſtious is generally effected in cloſe veſſels. It conſiſts in general in the tranſition of oxigene, either more or leſs ſolid, out of a body already

ready burnt, into an unburnt body. It depends upon the different elective attractions of this principle, for different combustible bases. To this class belong, the oxidation of metals by acids,—the reduction of metallic oxides by coal,—the combustion of sulphur, phosphorus, coal, and carbure of iron by nitric acid,—the combustion of hydrogene, the principle of ammoniac, by the oxigenated muriatic acid, &c. &c. In all these instances, oxigene passes out of one body into another; and as it was not melted by heat and light, these combustions generally take place without flame. We may observe, that in these instances of combustion, which may be called *tacit*, the property of combustibility is not lost, but only transferred from the body which absorbs the oxigene to that which loses it. We may likewise add, that as oxigene is more or less solid, that is, more or less destitute of heat and light, in the compounds into which it enters, bodies which detach it may sometimes absorb it in a state more pure and solid than that in which it was contained in those in which it before existed: and the disengagement of heat, and even of light, must then take place. Such is the origin of these two phenomena in detonations by nitre,—in the apparent action of nitric acid on sulphur, coal, phosphorus, the generality of metals, oils, and alcohol.

III. *The effects of light on bodies*, have not been hitherto estimated any other way than by their consequences; their cause has never yet been properly explained. It has been long known to act upon vegetables, to communicate to them colour, and to develope their combustible principles. Scheele observed, that

the rays of the sun coloured nitric acid, muriate of silver, mercurial precipitates, &c. It is at present well known, that all these effects are attended with the disengagement of a more or less considerable quantity of vital air: light, therefore, acts at the same time with heat upon these bodies,—separates their oxigene, melts it, and causes it to pass into the state of elastic fluidity. It is in this manner that it contributes to the decomposition of carbonic acid by the leaves of vegetables. That decomposition is, in truth, owing to a double attraction; 1. The attraction of light and heat for oxigene, which they tend to disengage into vital air, &c.; 2. That with which vegetable matters act upon carbone, the radical principle of this acid. By the same mechanism, light promotes the decomposition of water by the same organs of vegetables, and contributes to the formation of their oleaginous principle. By attending with more care than has been hitherto done, to the action of light upon many natural bodies, some important discoveries may be made, as I pointed out in the year 1780.

IV. *The formation and the decomposition of water*, depend entirely on the affinities of oxigene, which is one of its principles. Zinc, iron, oils, and coal, are already known to possess the property of separating the principles of water, by absorbing its oxigene, and disengaging its other principle, hydrogene, in the form of hydrogenous or inflammable gas. The extreme levity of this gas, accounts for the high temperature requisite to effect this decomposition suddenly. It appears, that the base of this gas, hydrogene, which is commonly either

liquid

liquid or ſolid, in the two ſtates in which water is commonly found on the ſurface of the globe, has a very great capacity for containing the matter of heat. It even appears, that this baſe, though combined with oxigene and water, ſtill poſſeſſes this property of abſorbing a great deal of heat; and that it is this property which renders aqueous vapour lighter than air; in conſequence of which, the mercury ſinks in the barometer, when the atmoſphere is filled with that vapour. This noble diſcovery of the nature and the decompoſition of water, throws much light on the theories of metallic ſolutions,—of the oxidation of various metals by moiſture,—of the formation of the immediate principles of vegetables,—of ſpirituous fermentation, and of putrefaction: And we already ſee, that almoſt all chemical theories are referable to, and depend upon the affinities of oxigene. It throws alſo great light on the phenomena of the atmoſphere,—the formation of meteors,—the laws which nature obſerves in the ſucceſſive changes of organic matters, &c. It is particularly worthy of obſervation, that ſuch ſubſtances as do not ſingly decompoſe water, effect this decompoſition by the aſſiſtance of other bodies. Thus ſulphur with alkali, tin with nitric acid, &c. decompoſe water at low temperatures, by means of complex affinities. Nothing can contribute more to throw light on a great number of the phenomena of nature and the arts, than the knowledge of theſe pre-diſpoſing affinities, &c.

V. There are ſtill ſeveral important *deſiderata* with reſpect to the formation of bodies, which the labours of chemiſts have not explained. One of theſe is the *for-*

mation of earths. Naturalists have given their opinions concerning the formation of earths: several of them have considered the conversion of silex into clay, as a fact sufficiently proved; but that notion is nothing but an ingenious hypothesis, not supported by facts. Chemists have not been able to change either siliceous earth into alumine, or alumine into siliceous earth. Nature, perhaps, operates this conversion; but as we are unacquainted with the means which she employs, we should not venture to guess, when not countenanced by direct experiments. To consider barytes, magnesia, and lime, as compounds consisting of siliceous and aluminous earths united with some other bodies, is to advance hypotheses which deserve but very little credit. No chemist has hitherto directed his enquiries to this scope: the necessary *data* are even wanting. The experiments of some moderns on the extraction of pretended metallic reguli, from earths treated with charcoal in a violent heat, have afforded only a fallacious result. It appears to be ascertained that all these reguli are but one and the same substance, phosphure of iron, formed from the earth of bones.

VI. Nearly similar is the state of our knowledge with respect to the formation of fixed alkalis. The modern ideas of the principles of chemistry, lead us to suspect azote as a principle of these salts.—We may perhaps even venture to consider this body, the existence of which in ammoniac has been fully proved by M. Berthollet, as a principle common to fixed alkalis and alkaline earths in general,—in a word, as the *alkaligenous* principle. For instance, there can be no doubt, that the fixed al-

kalis

kalis are partly decomposed in many of the operations of Chemistry: in the distillation of old soaps, and tartareous and acetous neutral salts, they are plainly changed into ammoniac.—This transmutation seems to shew, that fixed alkalis contain azote, which, by attaching itself to the hydrogene of the oil, forms ammoniac.—But these facts have not yet been carefully examined, with respect to the quantities of the fixed alkalis which appear to be decomposed, and that of the ammoniac which is obtained,—nor, what is of no less importance, with respect to the residue produced from the fixed alkalis; and we cannot hope to establish our theory upon this fact, till its circumstances be more exactly known. But though these were known, we should still have to enquire into the nature of the other principle or principles of fixed alkalis, and in what manner the radical principle of potash differs from that of soda, &c.

VII. *The formation and the decomposition of acids*, is one of the most valuable and best known parts of modern chemistry. We know that they consist all of a base or radical principle, more or less combustible, in combination with oxigene: that the oxigene being the same in them all, is the principle of their acidity; and that the differences among them are owing to the substances combined with the oxigene; which differ in each different acid.—We know the bases of the sulphuric, the nitric, the carbonic, the arsenic, and the phosphoric acids: we know them to be sulphur, azote, coal, arsenic, and phosphorus. But the acidifiable bases of the muriatic, the fluoric, and the boracic acids in the

mineral kingdom, remain ſtill undiſcovered; as well as the proportions in which hydrogene and carbone, which ſeem to form the baſes of all the vegetable acids, are united in them.

The decompoſition of the acids whoſe nature is known, is not hard to explain. We know that it muſt happen, whenever a combuſtible body, having a ſtronger affinity with oxigene than oxigene has with the acidifiable baſe, is applied to any acid: And ſuch is the theory of ſulphureous and nitrous acid gaſes by the decompoſition of the ſulphuric and nitric acids, &c.

The radicals of acids ought alſo to be diſtinguiſhed into ſimple and compound; ſulphur, phoſphorus, carbone, &c. are ſimple radicals. All the vegetable acids have radicals, that are formed of hydrogene and carbone. Theſe laſt are not decompoſed by combuſtible bodies, becauſe their radicals have more affinity with oxigene than metallic matters, &c. which are generally employed in this decompoſition. Thus, of metallic ſubſtances, only the metallic acids are ſoluble in the vegetable acids.

VIII. *The combination of acids with earths and alkalis,* forms the hiſtory of neutral ſalts, and of the mutual affinities or elective attractions of thoſe different matters. It comprehends the examination of the phenomena which take place when they unite,—the taſte which they acquire,—their form, ſolution, cryſtalliſation, alterations by fire and air, and mutual decompoſitions. It has been treated of at great length in this work.

IX.

IX. The oxidation and reduction of metals is also referable to the history of air and oxigene. We know, that what has been called the *calcination* of metals, is a combustion,—that it consists in the union and fixation of the base of vital air or oxigene, in the metal calcined; —that metallic *calces* are compounds of metals and oxigene, which we call *oxides*;—that most oxides are reduced only by giving out their oxigene to some other body having a stronger affinity with it;—that coal, by absorbing oxigene from metallic oxides in this manner, forms with it the carbonic acid, which is disengaged in such abundance during their reduction;—and that there are some metallic oxides, from which oxigene is separated in the state of vital air, by means of heat and light,—a fact which proves, that this oxigene is combined with different metals, with very different degrees of adhesive force. Thus several metals heated with metallic oxide, carry off their oxigene, as iron and zinc from the oxide of mercury, tin from the oxide of copper, &c. But two very important particulars in the history of the oxidation of metals, which have been ascertained by modern experiments, and which throw great light on all the phenomena of metallic matters, are, 1. That every different metal absorbs, in order to its saturation, a different quantity of oxigene: 2. That each metal may exist in different states of oxidation,—or, combined with different proportions of oxigene,—from that which merely begins the oxidation of a metal, to that by which it is completely accomplished,—for instance, from fifteen to forty or more parts of oxigene, to the hundred weight of iron.

The attentive examination of this second fact, leads

us to distinguish, in every metallic oxide, several different states in respect to the quantity of oxigene which it contains. Thus, mercury suffers an incipient oxidation, and is changed into a black powder in a number of circumstances, which have been hitherto considered as effecting only an extreme attenuation of the metal: and particularly when triturated or extinguished with fats, mucilages, syrups, &c. Thus, iron, in the state of martial ethiops, is the first oxide of that metal, in respect of the small quantity of oxigene which it contains, and cold water easily reduces the metal into this state: Lastly, copper, beginning to be oxidated, or combined with the smallest possible quantity of oxigene, is brown and reddish; whereas an oxide of this metal, fully saturated with oxigene, is of a bright green.

This distinction of metallic oxides, according to their different states of oxidation, or according as they contain different quantities of oxigene, and possess different properties, in consequence of their having been more or less burnt, enables us to explain a great many phenomena, of which chemists were formerly able to give no satisfactory account.

X. *The solution of metals* in different acids, the properties of these solutions, and of the salts which they afford, agree very well with the modern theory, and are much better explained by it, than they formerly were. No solution of a metal in an acid can take place, without the metal's being first oxidated.

Metals are oxidated by the sulphuric acid,—either by the acid itself, or by the water in which it is diluted.

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In the first of these cases, the acid is decomposed, and a quantity of sulphureous acid gas disengaged; in the second, the water is decomposed, and hydrogenous gas disengaged. Some metals decompose only the sulphuric acid, without acting upon the water; such as mercury, lead, &c.; and to burn these metals, the acid must be concentrated. Metals which act with more energy in decomposing water than in decomposing sulphuric acid, such as zinc and iron, are not so readily oxidated unless the acid be diluted, as it is from the water they must derive the necessary oxigene. What proves the certainty of this last fact is, that the sulphuric acid remains undiminished, none of it being decomposed. From these circumstances it is clear, that much more sulphuric acid must be necessary for the solution of a metal which decomposes the acid, than for the solution of a metal which decomposes the water combined with it. In the former case, two different sums of the acid are requisite, one to oxidate the metal, and another to dissolve the metallic oxide: if only the first sum were mixed with the metal, it would only be oxidated, and the second sum of acid would still be necessary to dissolve the oxide: in the laboratories, there is frequently occasion to make such an addition. Accurate observation has shown, that metallic oxides ought to be always in the same degree of oxidation or combination with oxigene, in order that they may be dissolved in the sulphuric acid; and that when they are fully saturated with the acid, they no longer combine with it. Before this period, they are not soluble in it; beyond it they are precipitated,—an event which happens when a sulphuric solution is exposed to too strong a heat, or left for a longer or shorter

time exposed to the air. In the first of these operations, the heat promotes the action of the metallic oxide upon the acid; and it of consequence takes up more oxigene than it contained or needed in order to remain suspended in the acid; in the second instance, it absorbs that principle from the atmosphere, till acquiring more than is necessary to its suspension, the oxide is precipitated. Such is the theory of sulphuric mother-waters. Solutions of metals by this acid afford crystals only in the former case. All these facts agree in shewing, that the metals act first upon their solvents; and that the sulphuric acid does not act upon them till they be oxidated to a certain degree.

Nitric acid is likewise decomposed by most metals. They are oxidated or *calcined* to a certain degree by absorbing its oxigene, with which they have a greater affinity than azote. But as they do not take up all the oxigene of the nitric acid,—not, at least, unless too much of the metal be employed, and the mixture be too much heated,—the azote is separated in combination with a portion of oxigene; and this particular combination constitutes nitrous gas. The nitric acid is more liable to decomposition than any other acid; its two component principles not being very intimately united. For this reason, it has always been considered as the chief solvent; and it is owing to the same circumstance, that water is seldom decomposed during the mutual action of metals and the nitric acid, and that a large quantity of water puts a stop to this re-action. Accordingly, solutions of metals in the nitric acid afford only one sort of elastic fluid, nitrous gas, which is sometimes mixed with a little gas azote, especially if the metals employed have a very strong affinity

affinity with oxigene, and absorb a great deal of it.

Metals which are soluble in the nitric acid combine, and remain in combination with it, only when containing a certain quantity of oxigene not equal to their saturation. Many metallic oxides, therefore, such as those of bismuth, antimony, mercury, tin, and iron, are very easily separated from nitric acid, solely by rest, by heat, or by exposure to the air. As they continue to absorb oxigene from the acid in which they are dissolved, or from the surrounding atmosphere, the quantity of nitric acid must also be very large; that it may be sufficient, first, to oxidate the metal,—secondly, to dissolve the oxide. If you employ only what is requisite for the former purpose, you obtain only a dry oxide; as in the instances of bismuth, zinc, tin, and antimony.

The muriatic acid does not act upon any metal without the assistance of water. Wherefore, as there are but few metals which act upon water, there are but few directly soluble in the muriatic acid; and nothing but hydrogenous gas is ever disengaged, in the case of solution, by this acid. Every thing concurs to show, that the principles of this acid adhere more obstinately together, than those of any other acid; and from this I am much inclined to think, than the unknown base of the muriatic acid, whatever it be, is the body which has the greatest possible affinity with oxigene. None of the combustible bodies which detach that principle from the other substances that contain it, takes it from this acid: but when metallic oxides are once formed, it dissolves them very readily; it even detaches them from several other acids; and it dissolves them even when fully saturated

rated with oxigene; which the other acids are not capable to do. The two last of these properties, which are very remarkable, certainly depend on the tendency which the muriatic acid has to absorb an excess of oxigene; a tendency so fully proved by the formation of the oxigenated muriatic acid, &c. When the muriatic acid dissolves metallic oxides that are too much oxidated to be dissolved by the other acids, it begins with carrying off a portion of the oxigene from the oxides, and part of the water being disengaged into oxigenated muriatic acid, the rest dissolves the remainder of the oxide that is less oxidated.

The action of the other acids on metals is not yet sufficiently known, to enable us to explain it so accurately. We shall only remark, that metals cannot decompose the carbonic acid; for coal the radical principle of that acid, has a stronger affinity with oxigene, than oxigene has with metals; as is proved by the decomposition of metallic oxides by the carbonaceous principle.

Lastly, The precipitation of metallic oxides from acids, by other metallic substances, depends entirely on the diversity of the affinities of oxigene with these substances. When copper precipitates oxide of silver, and iron, oxide of copper, in silver and copper; the reason of these phenomena is, that copper has a stronger affinity with oxigene than silver, and iron than copper.

XI. We are only beginning to understand the formation of the immediate principles of vegetables. It was long ago observed, that plants grew very well in pure water; and that all their constituent principles were formed

formed with water and atmospheric air: From these two sources they derive all their nourishment: From these, their extract, mucilage, oil, coal, acids, colouring parts, &c. are produced. Since the discovery of the different gasses, it has been observed, that they grow very rapidly in air altered and mixed with carbonic acid, as well as in hydrogenous gas. We have already taken notice, that leaves decompose water and carbonic acid. From the former, they absorb hydrogene; and from the second, carbone; disengaging, from both, vital air. They appear, likewise, to absorb azote. These well-known phenomena explain the formation of coal and of oil: for there can be no doubt, that the latter of these principles consists of hydrogene fixed by carbone, if the expression may be used, as it affords a good deal of water during its combustion. But we are still ignorant of the manner in which the colouring principle, the aroma, the fixed alkali, and the glutinous part, are formed; and whence the varieties of the oils, &c. only we venture to foretel, that new experiments on vegetation, in prosecution of these new views, will hereafter explain the nature and the composition of all these different immediate principles.

We are now beginning to understand the formation of vegetable acids, during vegetation, and even by that act. In the history of acids, we have already taken notice, that they appear to be all formed of similar bases: that, by a last analysis, we obtain equally from them all, carbone, hydrogene, and oxigene; and that they seem to differ only in the proportions of the principles, and in the pressure or density of the substances. The

more

more we extend our experiments upon acids, the more probable will this opinion become.

Scheele and M. Crell have found an analogy to exist among several of them. Scheele, who at first thought the oxalic acid and the acid of sugar to be different from each other, was at length convinced, as we have mentioned elsewhere, that there is no difference between these acids, but that they are precisely the same;—1. By extracting the portion of potash which conceals the properties of the oxalic acid in common salt of sorrel, and, by that means, reducing it to pure oxalic acid; 2. By changing acid of sugar into salt or sorrel, by the addition of a little potash.

If to this most important fact in the analysis of vegetables, we add the valuable experiments of M. Crell, who has extracted tartareous acid from alcohol, and has changed tartareous acid into vinegar, and into oxalic acid, and oxalic acid, again, into acetous acid,—we shall see, that the oxalic, the tartareous, and the acetous acids, greatly resemble each other: that they are formed from one base, and differ only in the proportions of the oxigene which they contain. It appears that the tartareous acid contains least of this principle: that the oxalic acid contains a good deal more of it; and that the acetous acid contains still more than either of the other two. I cannot help thinking, that if four vegetable acids, which were at first thought to be essentially different from each other, have been already found to consist of the same base, combined with different proportions of oxigene; future experiments may in like manner discover the same analogy to subsist among others, particularly between the citric and malic acids,

which

which are so often found together in vegetable juices. These assertions are supported by some experiments on the analysis of the quinquina of St Domingo, which are inserted in one of the volumes of the Annals of Chemistry.

Lastly, Our present knowledge of the theory of vegetation, already explains to us the influence of manures. M. Parmentier is the first and almost the only natural philosopher that has begun to apply this theory to agriculture, in a memoir which he read to the Agricultural Society of Paris, in June 1791.

XII. Spiritous fermentation,—the simultaneous formation of the carbonic acid and alcohol,—the necessity of water and a saccharine principle to begin that fermentation,—all together afford us reason to think, that it is produced by the decomposition of water. The oxigene of the water combining with the coal, forms carbonic acid, which is disengaged; and the alcohol is formed by the fixation of the hydrogene in the oily base, which, with different quantities of oxigene, forms the tartareous, the oxalic, and the acetous acids. This theory explains fully the reason why alcohol affords so much water in combustion,—why it is changed by mineral acids into oxalic acid, acetous acid, &c. It is true, we do not yet well understand how it passes into the state of æther; only it is probable that, in such operations, the alcohol loses a portion of its oxigene, which goes to the formation of water.

XIII. Chemists are beginning to conjecture, how far the science can conduct them in their enquiries into the

formation

formation of animal matters. Digestion seems to be simply an extraction or solution by the gastric juice. The fixation of gas azote is one of the principal functions of organization. From the experiments of Scheele, and, still more, from those of M. Berthollet, it appears to occasion the principal difference between animal matters and vegetable substances. It contributes to the formation of the ammoniac which these substances afford in such abundance by distillation, &c. Respiration appears to be one of the most powerful means employed by nature for increasing the quantity of azote in animal substances. The differences among the animal fluids designed for the nourishment of the different organs, and the peculiar nature of the gelatinous humour, of the albuminous liquor, and of the fibrous part, which is melted and dissolved in certain fluids, are now sufficiently ascertained. We know that the former is the least animalised,—that the second is more so,—and that the third is the last substance produced by the action of the vital functions upon the fluids: We know, also, that this last humour is reunited simply by rest into a tissue of solid fibres; and that the albuminous part is thickened, and rendered concrete by heat; whereas the gelatinous substance is sooner decomposed, but also more readily reproduced. Peculiar acids have been found in the excrementitious humours; but we know nothing of their formation: we are particularly ignorant of the manner in which the phosphoric acid, which abounds so generally throughout this kingdom, is formed.

The nature of the solids of animals has engaged the attention of modern chemists. The distinctive nature

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of the fibrous texture of the muscles,—of the membranous plates,—of the hard laminæ of the bones, &c. is now known. Medicine expects from the discoveries of chemistry, a solution of the problems which still subsist concerning the formation of the several matters which constitute these parts; especially the phosphoric acid, the albuminous juice, the fibrous matter, calcareous phosphate, and the peculiar oils which are found in this kingdom of nature. The formation of ammoniac, which was guessed at by Bergman and Scheele, and has been since fully explained by M. Berthollet, affords us reason for thinking, that all these problems may be successively solved. In all probability, we want only a few principal facts, to enable us to reach several important results: The hope of this must encourage those physicians who know the importance of chemistry.

XIV. Ever since the days of Chancellor Bacon, the history of putrefaction has been acknowledged as an important object in medical enquiries. Several eminent naturalists have studied it with some success: But the cause of this decomposition, and the manner in which it is effected, have not been yet discovered. The late discoveries throw some light on this important point. Water, which promotes and excites putrefaction, is understood to be decomposed in that intestine emotion. We understand how ammoniac is formed in such abundance,—by the fixation of azotic gas and hydrogenous gas. The slow decomposition of grease, its preservation and condensation, of which the last in some instances proceeds to solidity and hardness in consequence of the fixation of vital air from water, are now accounted for: In like

manner have been explained, the volatilization and reduction of animal substances exposed to the air into elastic fluids; in a word, the complete separation of all those principles, and their dispersion in the atmosphere, which conveys them into new combinations; with that whole series of compositions, and transitions of substances out of one kingdom into another,—so happily expressed by Beccher under the philosophical emblem, *circulus æterni motus*, which he uses to signify the indefatigable activity of nature.

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TABLE OF THE NOMENCLATURE.

WE ſhall begin with obſerving, that it was not our intention to exhibit, in this Table, the whole of the chemical nomenclature: Our deſign was only to arrange together, under ſeveral claſſes of compounds, ſuch a number of ſelect examples as might enable any perſon, with a little ſtudy, to apply the principles of our ſyſtem of nomenclature to all the compounds with which chemiſts are at preſent acquainted, as well as to thoſe which may be hereafter diſcovered. For this purpoſe, we have divided the table into ſix perpendicular columns, with the general titles at their heads, expreſſing the ſtate of the bodies whoſe names they contain. Each of theſe columns conſiſts of 55 diviſions,—that being the number of the undecompoſed ſubſtances with which we are acquainted, and which ſucceed in order in the firſt column. The correſpondent horizontal diviſions of the other five columns, comprehend the principal combinations of thoſe ſimple ſubſtances, and muſt of conſequence be equally numerous.

We ſhall trace each of theſe columns through its principal diviſions.

COLUMN I.

The title of the first column is SUBSTANCES THAT HAVE NOT YET BEEN DECOMPOSED. The reason why we consider these bodies as simple, is, that we have not yet been able to analyse them. All the accurate experiments which have been performed during these last ten years, concur to shew, that these bodies can neither be separated into more simple substances, nor reproduced by artificial combinations. These substances are, as we have already mentioned, 55 in number. They, with their corresponding compounds are numbered with Arabic numerals, running down both the right and left sides of the table.

The 55 simple substances of the first column are divided into five classes, according to the differences of their nature. The first of these classes consists of four bodies, which appear to come nearly under the character that has been assigned to the elements, and act the most important part in combinations. These are, 1. *Light*: 2. *Caloric*, which has hitherto been named matter of heat: 3. *Oxigene*, or that part of vital air which becomes fixed in burning bodies, augments their weight, and changes their nature, and of which the most eminent property being to constitute acids, has induced us to give it a name alluding to that remarkable characteristic: 4. *Hydrogene*, or the base of the elastic fluid which is called Inflammable Gas, and which, as it is one of the principles of water, exists in ice, in a solid state. These first four principal bodies are connected by a brace.

The second class of the undecomposed substances, in

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the firſt column, conſis of 26 different bodies,—all of which are liable to become acid, by combining with oxigene; and in conſequence of their poſſeſſing this characteriſtic in common, we diſtinguiſh them by the name of *acidifiable baſes*. There are only four of theſe 26 bodies that can be obtained in a ſimple uncombined ſtate. Theſe four are, *azote*,—the *radical principle* of the nitric acid *, or the ſolid baſe of atmoſpheric mephitis, well known at preſent to chemiſts, in the fifth diviſion; *pure coal, carbon*, or the *radical principle* of the carbonic acid, in the ſixth diviſion; *ſulphur*, or the *radical principle* of the ſulphuric acid, in the ſeventh diviſion; and *phoſphore*, or the *radical principle* of the phoſphoric acid, in the eighth diviſion. The other 22 are only known as they exiſt in combination with oxigene, and in the ſtate of acids. But in order to extend and ſimplify the Science, we have ſuppoſed them ſeparated from oxigene, and exiſting in that pure ſtate to which it is probable they may one day or other be reduced by art. They are all, therefore, inſerted in the firſt column, as exiſting in this ſuppoſed ſimple ſtate, and diſtinguiſhed as the radical principles of the acids into which they enter.

The third claſs of the undecompoſed ſubſtances of the firſt column, conſiſts of metallic matters, in number 17, extending from the 31ſt to the 47th diviſion, *incluſive*. They all retain the names by which they have been hitherto known. The three firſt are liable to paſs

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* It is alſo to be obſerved, that azote is never obtained in a ſeparate inſulated ſtate, but always in a gazeous ſtate, and in combination with caloric.

into an acid ſtate,—agreeing, in this characteriſtic, with the preceding acidifiable baſes.

In the fourth claſs, are the earths which have not yet been decompoſed,—*ſiliceous earth*, *aluminous earth*, *barytes*, *lime*, and *magneſia*, in ſo many ſucceſſive diviſions. None of theſe five earths has yet been decompoſed; and they are therefore to be conſidered, in the preſent ſtate of our knowledge, as ſo many ſimple bodies.

Laſtly, the fifth claſs of undecompoſed ſubſtances, conſiſts of the three alkalis,—*potaſh*, *ſoda*, and *ammoniac*. The laſt of theſe ſubſtances has been decompoſed by Meſſrs Bergman and Scheele; and M. Berthollet has determined, in a preciſe manner, the nature and the quantity of its principles: But we were unwilling to ſeparate it from the fixed alkalis, the component principles of which we hope alſo to diſcover in a ſhort time: It would be improper to break through the order, and overlook the mutual relations of thoſe ſubſtances, which in many reſpects act, in chemical experiments, as undecompoſable matters.

The firſt column, all the diviſions of which we have now explained, is, like each of the others, divided longitudinally into two; the left ſide exhibits the old names of the ſubſtances in Italic characters.

Column II.

The ſecond column is intituled, The same Substances reduced into the state of Gas, by the addition of Caloric. It exhibits the permanent aëriform ſtates into which a number of the ſimple ſubſtances

ſtances in the firſt column are liable to paſs. In this column, there are only four elaſtic fluids, the names of which, like all the words in the other columns, are derived from the names of the undecompoſable matters, and are rendered ſufficiently intelligible, by the addition of the word *gas* to the correſpondent words in the firſt column:—*Oxigenous gas, hydrogenous gas, gas azote,* and *ammoniacal gas.*

Column III.

The title of the third column informs the reader, that it conſiſts of The same Substances which appear in the firſt column, combined with Oxigene. This is one of the fulleſt columns in the Table; for, almoſt all the bodies in the firſt column are capable of combination with oxigene. The names in it are all compounded of two words, expreſſive of the two matters of which the ſubſtances to which they belong, conſiſt. The firſt of theſe words, is the generic term of the acid, which indicates the ſaline character that it derives from oxigene: The ſecond peculiariſes each acid, and refers to its peculiar radical principle. The 5th diviſion of this third column exhibits the combination of *azote*, or *nitric radical,* with oxigene. From that combination ariſe three compounds, produced by a diverſity in the proportions of the principles: The azote is either united with the leaſt poſſible quantity of oxigene, and it then forms the *baſe of nitrous gas;*—or ſaturated with it, and then it conſtitutes *nitric acid;*—or united with leſs than in nitric acid, yet with more than in nitrous gas, and then it forms *nitrous acid.* We

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expreſs the three different ſtates of this combination ſimply by varying the termination of the ſame word. In the ſame manner, the termination of the *ſulphuric acid* is varied in the 7th diviſion; that of the *phoſphoric acid*, in the 8th diviſion; and that of the *acetic acid*, in the 13th. Theſe acids exiſt in two ſtates of combination with oxigene, according to the quantities which their acidifiable baſes contain. When the baſes are completely ſaturated, the acids produced are, the *ſulphuric*, the *acetic*, and the *phoſphoric:* When the baſes are not ſaturated, and do not contain oxigene in a due proportion, we call the acids that are then formed, the *ſulphureous*, the *acetous*, and the *phoſphorous*. We have followed the ſame general rule in the denomination of all the other acids. When an acid is known only in one ſtate, and, in that ſtate, the baſe is fully ſaturated with oxigene, ſuch as the carbonic or the boracic acid, its name then terminates in *ic:* when it is known in two ſtates, it is diſtinguiſhed, in the ſtronger ſtate, by the termination *ic;* In the weaker, or that in which there is an exceſs of the acidifiable baſe, its name terminates in *ous*. Accordingly, in thoſe acids which are known only in one ſtate, and yet have their names terminating in *ous*, it may be underſtood that there is an exceſs of the acidifiable baſe: ſuch are, the *tartareous* acid, in the 14th diviſion; *pyro-tartareous*, in the 15th; the *pyroligneous*, in the 21ſt; and the *pyro-mucous*, in the 22d. The *muriatic* acid, in the 9th diviſion, is in a ſtate different from any of the others. Beſide its combination, in which it is ſaturated with oxigene, it is alſo capable of receiving an exceſs of oxigene, which commu-

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nicates to it ſome remarkable properties. To diſtinguiſh it as it exiſts in this laſt ſtate, we call it the *oxigenated muriatic acid;* and the epithet *oxigenated,* may be in like manner applied to any of the other acids that ſhall be found exiſting in the ſame ſtate. The lower diviſions of this third column, from the 31ſt to the 47th *incluſive*, exhibit the nomenclature of another ſyſtem of bodies.

The word *oxide* is there found at the beginning of the compound denomination. The reaſon which induced us to ſubſtitute this name to that of metallic calces, has been explained in our memoir on this nomenclature. It does not expreſs a ſaline quality, as the word *acid* does, and yet denotes a combination of oxigene: and it may be applied to all bodies that are ſuſceptible of a combination with oxigene without paſſing into a ſtate of acidity; and this, whether their not becoming acid be owing to the ſcanty proportion of the oxigene, or to the nature of their baſes. Thus, for inſtance, the phoſphoric acid, vitrified, or deprived of a part of its oxigene, by the action of a ſtrong heat, becomes a ſort of *phoſphoric oxide.* Nitrous gas, too, which is not more acid than phoſphoric glaſs, is properly a *nitrous oxide*; and hydrogene, in combination with oxigene, forms not an acid, but water, which, in this light, may be conſidered as an *oxide of hydrogene.*

Of the 17 metallic oxides, between the 31ſt and the 48th diviſion, there are 3 which are only in intermediate ſtates between the metallic and the acid. It is for want of oxigene that the oxides of arſenic, molybdena, and tungſten, in the 31ſt, the 32d, and the 33d diviſions, are not yet become acid. A greater quanity of the acidifying principle conſtitutes them the *arſenic*, the *molybdic*, and

and the *tunſtic* acids. Epithets taken from colour ſerve to diſtinguiſh the different oxides of the ſame metal, as may be obſerved of the oxides of antimony, lead, and mercury.

COLUMN IV.

THE 4th column, intituled, THE SAME SUBSTANCES IN A GAZEOUS OXIGENATED STATE, contains ſimple ſubſtances combined both with oxigene and with a ſufficient quantity of caloric to reduce them to permanent gaſes, under the uſual preſſure and temperature of the atmoſphere. There are only ſix ſubſtances known to exiſt in this ſtate,—*nitrous gas*, *nitrous acid gas*, *carbonic acid gas*, *ſulphureous gas*, *muriatic* and *oxigenated muriatic acid gas*, and *fluoric acid gas.*—No other oxigenated ſubſtance having been reduced into a gazeous ſtate by caloric, we have therefore introduced into this column ſome peculiar combinations of metallic oxides, or oxigenated metals, with different baſes: It is accordingly divided in the middle; and the lower part intituled, METALLIC OXIDES WITH DIFFERENT BASES.—From the 31ſt to the 45th diviſion *incluſive*, are the combinations of metallic oxides with ſulphur and alkalis. The former are called *ſulphurated oxides* of arſenic, lead, &c; the latter, *alkaline metallic oxides.* When any of theſe compounds varies in the proportions, and conſequently in its properties, we diſtinguiſh it in the ſame manner as the ſimple oxides, by epithets taken from colour: thus we ſay, *grey*, *red*, *orange*, &c. *ſulphurated oxides of antimony.*

COLUMN

Column V.

The 5th column, consisting of the simple substances, in the 1st column, oxigenated and neutralised by the addition of bases, or, neutral salts in general, exhibits many more names than any of the preceding columns; because we have thought it necessary to give, in this column, a greater number of examples, in order to show the superiority of this system of nomenclature over the ancient names; most of which, though expressing similar combinations, were in nowise analogical.

Any person may see, by looking slightly over this column, that the names contained in it, and expressing similar combinations, have all one termination. It is easy to see, that this must greatly facilitate the study of the science, and contribute greatly to the perspicuity of works of chemistry in which this mode of denomination shall be adopted. The bodies belonging to this column are compounds of three substances,—acidifiable bases, the acidifying principle, or oxigene, and terrene, metallic, or alkaline bases. But we use only two words to express their nature; for, the first of these being derived from the name of the oxigenous or acid combination, serves to denote that combination; the other refers solely to the base with which the acid is saturated. The names of all these compounds terminate in *ate*, when they contain acids completely saturated with oxigene: but when the acids are not completely saturated with that principle, the name of the neutral salt then terminates in *ite*. We have given more instances of neutral

ſalts formed from thoſe acids which are beſt known and moſt uſed, than of the ſalts formed with the acids which are leſs common *.

The names of 18 genera of neutral ſalts in this table terminate in *ate*. This termination of their name ſhews, that the acid to which they owe their formation is known only in the ſtate of the complete ſaturation of its acidifiable baſe with oxigene: and accordingly, the names of all the acids to which theſe neutral ſalts belong, terminate in *ic*, by the rules of our nomenclature, as appears in the 3d column.

The 14th, 15th, 21ſt, and 22d, diviſions, exhibit names of neutral ſalts, terminating in *ite*. The termination

* The neutral ſalts are now exceedingly numerous. There are 29 acids known, which, as each of them may be ſaturated by 4 ſoluble earths, 3 alkalis, and 14 metallic oxides which are not acidifiable (for it appears, that the acidifiable oxides, ſuch as thoſe of arſenic, molybdena, and tungſten, do not neutraliſe the mineral acids), form 609 ſpecies of compound ſalts. Add to this, that 5 of theſe acids, the nitric, the ſulphuric, the muriatic, the acetic, and the phoſphoric, combine with neutraliſable baſes in both of their different ſtates; and that a number of acids, ſuch as the ſulphureous, the tartareous, the oxalic, and the arſenic, admit of ſaturation with different quantities of the baſe, in conſequence of which they form what are called *acidula*, of which there are already 8 different ſpecies very well known *. With this addition, the number of the neutral ſalts will amount to 722 ſpecies, the names of which may be methodically formed, from the 46 or 48 examples given in this table.

* Such are, *acidulous ſulphate of potaſh*, or vitriolated tartar with an exceſs of the acid; *tartarites*, or *acidulous oxalates of potaſh*, *ſoda*, and *ammoniac*, or creams of tartar, and ſalts of ſorrel, artificially prepared with the pure tartareous and oxalic acids combined with a ſmall quantity of the alkaline baſes; and the *acidulous arſenic of potaſh*, or arſenical neutral ſalt of Macquer.

nation of theſe ſalts is meant to indicate, that in the acids from which they are formed, there is an exceſs of the acidifiable baſe.

There are other diviſions in this column, exhibiting both the terminations *ate* and *ite:* thus, in the 5th column, *nitrate* and *nitrite;* in the 7th *ſulphate*, and *ſulphite;* in the 8th, *phoſphate* and *phoſphite;* in the 13th, *acetate* and *acetite*. Theſe terminations ſhew, that the ſalts to which they belong owe their formation to acids exiſting in two different ſtates. *Nitrates*, for inſtance, are formed by the *nitric* acid, in which the acidifiable baſe is fully ſaturated with oxigene; and *nitrites* again are formed by the *nitrous* acid, in which the baſe is not completely ſaturated with the acidifying principle.

In ſome others of theſe diviſions, there are neutral ſalts different from any of the above. Thus, in the 9th diviſion, we have *oxigenated muriate of potaſh*, the combination of the oxigenated muriatic acid of potaſh, a ſalt very different from ſimple muriate with potaſh, and which M. Berthollet has diſcovered to poſſeſs the property of detonizing on burning coals. In other diviſions in this ſame column, we have expreſſed ſaline combinations in which the acids predominate, by adding to the ſyſtematic name of theſe ſalts, the epithet *acidulous:* Thus, the 14th diviſion contains *acidulous tartarite of potaſh;* and the 16th, *acidulous oxalate of potaſh*. Laſtly, by the expreſſion *ſuperſaturated*, we diſtinguiſh thoſe neutral ſalts in which the baſe predominates, as may be ſeen in the 8th diviſion, in which is, *ſuperſaturated phoſphate of ſoda;* and in the 10th, in which we have borax, or *ſuperſaturated borate of ſoda*.

By reflecting on the ſtrict etymological method which

we have obſerved in affixing theſe denominations to neutral ſalts; and conſidering, that, in the old nomenclature, there appears ſcarce any analogy between the names of ſalts of a ſimilar nature; the Reader will perceive the reaſon of the changes which appear in this column, which are more numerous than thoſe which any of the others exhibits; though there is actually nothing new in it, but the variation of two terminations of names which were before in uſe.

Column VI.

The ſixth and laſt column of this table, which comprehends ſimple ſubſtances combined in their natural ſtate, and neither oxigenated nor acidified,—as the title ſhews, is one of the ſhorteſt, and contains but few compounds. The lower diviſions, from the 31ſt to the 48th, contain compounds conſiſting of different metals, which we ſuffer to retain the names of *alloys* and *amalgams*, by which they have been hitherto known. Above the 31ſt diviſion, there are only three which exhibit a new nomenclature, founded on the ſame principles with the foregoing. The ſixth contains *carbure of iron*;—a denomination by which we have diſtinguiſhed the natural combination of coal and iron, called *plumbago*. The 7th diviſion exhibits metallic ſulphures, or natural combinations of ſulphur with metals,—alkaline ſulphures, or combinations of ſulphur with alkalis and ſulphurated hydrogenous gas, or the ſolution of ſulphur in hydrogenous gas. Laſtly, in the 8th diviſion, we expreſs, by the generic name of *metallic phoſphures*, natural compounds of phoſphorus with metals: Thus, to the name

ſyderite,

ſyderite, we ſubſtitute the expreſſion *phoſphure of iron,* which plainly ſignifies the combination of phoſphorus with iron: and theſe three words *carbure, ſulphure,* and *phoſphure,* differing only in the termination from names which are very well known, convey an accurate idea of ſimilar combinations, and diſtinguiſh them from all other compounds.

Below theſe ſix columns, we have placed a nomenclature of the principal compound bodies that are found in vegetables. In this part of the table, we have merely ſelected from among the old names, thoſe whoſe ſimplicity and plainneſs render them ſuitable to our purpoſes.

Such is the method which we have followed in forming the ſyſtem of names exhibited in this table. Thoſe who make themſelves maſters of this table, which may very eaſily be done, will readily perceive, that we have formed but very few new words, excepting ſuch as were indiſpenſably neceſſary to denominate ſubſtances before unknown, ſuch as the newly-diſcovered acids. By tracing the order of the ſubſtances in the firſt column, from which all the reſt are derived, any perſon will ſee, that we uſe no new words but *oxigene, hydrogene,* and *azote.* As to the words *caloric, carbone, ſilice, ammoniac,* both theſe and all their derivations are formed by a very ſlight change from names before well known and much uſed. It is plain, therefore, that our new nomenclature differs from the old, in nothing but new terminations; and if theſe changes render the ſtudy eaſier, and the language of the ſcience more intelligible,—above all, if they enable us to expreſs ourſelves with unequivocal preciſion,—as the trial of this nomenclature that has been made

made in the courſe of Lectures on Chemiſtry delivered in the King's Garden and the Lyceum, affords us reaſon to hope;—the reformation which we wiſh to introduce on ſo ſimple a method, cannot but be highly favourable to the progreſs of Chemiſtry.——The experience of thoſe years, during which period I have now taught this nomenclature, as well as the teſtimony of all my pupils, have confirmed the hopes which I formerly entertained.

ADVER-

TABLE I.

The Diviſion and Characters of the Eight Claſſ

A N I M A

Having an Head.				
With Noſtrils.				
With Ears.				
Two Ventricles in the Heart.			One Ventricl	
Warm Blood.			Blood ne	
Inſpiring and expiring the Air frequently.			Inſpiring and expiring t at long Intervals.	
Viviparous.				
With Teats.		V		
1ſt Order. QUADRUPEDS.	2d Order. CETACEOUS ANIMALS.	3d Order. BIRDS.	4th Order. OVIPAROUS QUADRUPEDS.	5th Ord SERPENT
Four Feet, and hairy Skin.	Fins, and no Hair.	Feathered.	Four Feet, and no Hair.	Scaly, wit Feet or Fi

t *Classes of Animals, by* DAUBENTON.

A L S.

			The most Part having no Head.
		Without Nostrils.	
		Without Ears.	
Ventricle in the Heart.		The Heart variously formed, or unknown.	
Blood nearly cold.		A whitish Fluid, instead o Blood.	
xpiring the Air, ntervals.	Admitting the Air by Gills.	Admitting the Air by Spiracula.	No apparent Entrance or Aperture to admit Air.
Oviparous.			
Without Teats.			
5th Order. SERPENTS.	6th Order. FISHES.	7th Order. INSECTS.	8th Order. WORMS.
aly, without eet or Fins.	Scaly, with Fins.	Having Antennæ.	Having neither Feet no Scales.

Table II. *Quadrupeds, divided*

				Orders.	
QUADRUPEDS,	Without teeth	— — —		I.	— —
	With teeth.	With grinders only	— —	II.	— —
		Grinders and canine teeth only	—	III.	— —
		Incisive teeth in the lower jaw only	—	IV.	— — Ru
				V.	Ruminant, with cloven feet; eig incisive teeth.
		Incisive teeth in both jaws.	Ungulated feet.	VI.	The hoof entire
				VII.	The hoof cloven.
				VIII.	Three ungulated t
				IX. X.	Four ungulated t
				XI.	Four ungulated to
			Ungulated feet, and two incisive teeth in each jaw.	XII.	Without canine t
					With canine teeth
			Four incisive teeth in each jaw.	XIII.	— —
			Four incisive teeth in the upper, and six in the lower jaw.	XIV.	— —
			Six incisive teeth in the upper, and four in the lower jaw.	XV.	— —
			Six incisive teeth in each jaw.	XVI.	The toes separate each other.
					The toes joined t
			Six incisive teeth in the upper, and eight in the lower jaw.	XVII.	— —
			Ten incisive teeth in the upper, and eight in the lower jaw.	XVIII.	—

...vided according to the *Syſtem of* BRISSON.

SECTIONS.	GENERA.	
Hairy ſkin	Ant-eater	*Myrmecophaga.*
Scaly	Manis	*Pholidotus.*
Hairy ſkin	Sloth	*Tardigradus.*
Bony covering or ſhell	Armadillo	*Cataphractus.*
Two long tuſks above, and a trunk	Elephant	*Elephas.*
Two long tuſks below, and no trunk	Sea Cow	*Odobenus.*
Ruminant, ungulated; ſix inciſive teeth	Camel	*Camelus.*
...nt, with ...n feet; eight ...e teeth. Simple horns. Turned upwards. Fore legs longer than hinder legs	Camelopardalis	*Giraffa.*
The legs of equal length	Goat	*Hircus.*
Turned back	Sheep	*Aries.*
Turned ſideways	Ox	*Bos.*
Branched horns	Stag	*Cervus.*
No horns	Muſk	*Tragulus.*
...f entire	Horſe	*Equus.*
...f cloven.	Hog	*Sus.*
...ngulated toes on each foot	Rhinoceros	*Rhinoceros.*
...ngulated toes before, three behind, Two inciſive teeth in each jaw	River Hog	*Hydrochærus.*
Ten inciſive teeth in each jaw	Tapir	*Tapirus.*
...gulated toes on each foot	River Horſe	*Hippopotamus.*
...t canine teeth. Prickles on the body	Porcupine	*Hyſtrix.*
Without prickles. Tail flat and ſcaly	Beaver	*Caſtor*
Short tail. Long ears	Hare	*Lepus.*
Short ears	Coney	*Cuniculus.*
Long tail. Flat	Squirrel	*Sciurus.*
Round	Dormouſe	*Glis.*
Naked tail	Rat	*Mus.*
...nine teeth. Without prickles on the body	Shrew Mouſe	*Muſaraneus.*
With prickles	Hedge Hog	*Erinaceus.*
Separate toes	Ape	*Simia.*
Toes joined by a membrane ſo as to form wings	———	*Pteropus.*
Separate toes	Maki	*Proſimia.*
The fore toe joined ſo as to form wings	Bat	*Veſpertilio.*
—	Seal	*Phoca.*
...s ſeparate from ...ch other. Four toes on the fore, and five on the hinder feet	Hyæna	*Hyæna.*
Five toes on the fore, and four on the hinder feet	Dog	*Canis.*
Five toes on each foot, Firſt toe remote from the other	Weezel	*Muſtela.*
Firſt toe near the other	Badger	*Meles.*
Feet which reſt on the heel in walking	Bear	*Urſus.*
Hooked claws which may be drawn back and concealed	Cat	*Felis.*
...s joined together by a membrane	Otter	*Lutra.*
—	Mole	*Talpa.*
—	Opoſſum	*Philander.*

		ORDERS.	SECTIONS.	GENERA.	
IRDS ARE Either CLOVEN-FOOTED; that is, they have the toes naked, and apart from each other; The legs feathered as low as the calcaneum, or bone which sustains the toes. Four toes all separate from each other, quite to their base. Three toes before, and one behind.	I.	The beak strait; the upper mandible thickened, and somewhat curved at the point; the nostrils half-covered with a thick soft membrane. It consists of one genus only.	— — — — —	Pigeon.	*Columba.*
	II.	The beak conical and curved. It consists of six genera.	Sections. 1. The head ornamented with appendices.	Turkey.	*Gallus Pavo.*
				Cock and Hen.	*Gallus.*
				Guinea Hen	*Meleagris.*
			2. No appendices on the head.	Grous	*Lagopus.*
				Partridge	*Perdix.*
				Pheasant	*Phasianus.*
	III.	The beak short and crooked. It consists of five genera.	1. The base of the beak covered with a naked skin.	Hawk	*Accipiter.*
				Eagle	*Aquila.*
				Vulture	*Vultur.*
			2. The base of the beak covered with feathers turned forwards.	Owl	*Asio.*
					Strix.
	IV.	The beak long and conical. It consists of six genera.	1. The feathers on the base of the beak turned forward, and covering the nostrils.	Chough	*Coracia.*
				Crow	*Corvus.*
				Magpie	*Pica.*
			2. The feathers at the base of the beak turned backward; the nostrils uncovered.	Roller	*Galgulus.*
				Oriole	*Icterus.*
				Bird of Paradise	*Manucodiata.*
	V.	The beak strait; the upper mandible grooved on each side towards the point. It consists of four genera.	1. The beak convex above.	Butcher Bird	*Lanius.*
				Thrush	*Turdus.*
			2. The beak flattened horizontally towards the base, and nearly triangular.	Chatterer.	*Cotinga.*
				Fly-catcher	*Muscicapa.*
	VI.	The beak strait, and the mandibles not grooved. It consists of two genera.	— — — — —	Beef eater	*Buphagus.*
				Starling	*Sturnus.*
	VII.	The beak slender, and rather bent. It consists of two genera.	— — — — —	Hoopoe	*Upupa.*
				Promerops	*Promerops.*
	VIII.	The beak very small, flattened horizontally at its base, and bent at the point; the opening of the mouth appears larger than the head. It consists of two genera.	— — — — —	Goat sucker	*Caprimulgus.*
				Swallow	*Hirundo.*
	IX.	The beak conical, and gradually diminishing to the point. It consists of eight genera.	1. The two mandibles strait.	Tanager*	*Tangara.*
				Goldfinch	*Carduelis.*
				Sparrow	*Passer.*
				Grosbeak	*Coccothraustes.*
				Bunting	*Emberiza.*
				Coly	*Colius.*
				Bullfinch	*Pyrrhula.*
			2. The two mandibles crossing each other.	Crossbill	*Loxia.*
	X.	The beak awl-shaped. It consists of three genera.	1. The nostrils uncovered.	Lark	*Alauda.*
				Beccafico	*Ficedula.*
			2. The nostrils covered by the feathers at the base of the beak.	Tit-mouse	*Parus.*
	XI.	The beak wedge-shaped. It consists of one genus only.	— — — — —	Nuthatch	*Sitta.*
	XII.	The beak filiform. It consists of three genera.	1. The beak curved.	Creeper	*Certhia.*
			2. The beak flattened horizontally, and a little enlarged at the point; the feet very short.	Humming Bird	*Polytmus.*
					Mellisuga.
Two toes before, and two behind.	XIII.	Consisting of nine genera.	1. The tongue very long and vermiform, but not longer than the beak.	Wryneck	*Torquilla.*
				Wood-pecker	*Picus.*
			2. The beak very long, quadrangular, and pointed.	Jacamar	*Galbula.*
			3. The beak somewhat curved, convex at its upper part, and flattened laterally.	Barbet	*Bucco.*
				Cuckow	*Cuculus.*
			4. The beak short and crooked.	Curucui	*Trogon.*
				Ani	*Crotophagus.*
				Parrot	*Psittacus.*
			5. The beak long, and as thick as the head, indented like a saw; the point of each mandible turned downwards.	Toucan	*Tucana.*
The middle to be united with the exterior for the space of three phalanges, and with the interior for the space of one phalanx; four toes; three before, one behind.	XIV.	—— seven genera.	1. The beak short, and flattened laterally near the point.	. . . .	*Rupicola.*
				Manakin.	*Manacus.*
			2. The beak conical, and indented like a saw; the end of each mandible bent downwards.	Motmot	*Momotus.*
			3. The beak strait, and of a moderate length.	King's-fisher	*Ispida.*
				Tody	*Todus.*
			4. The beak curved and sharp.	Bee eater	*Apiaster.*
			5. The beak thick, and formed like a scyth.	Hornbill	*Hydrocorax.*
The lower part of the legs without feathers. Wings too small for flight.	XV.	—— four genera.	1. Two toes before, none behind; the beak strait, somewhat flattened horizontally, and curved at the point; the upper part of the head bald & scaly.	Ostrich.	*Struthio.*
			2. Three toes before, none behind.	Emu	*Rhea.*
				Cassowary	*Casuarius.*
			3. Three toes before, one behind; the beak long and strong; both mandibles hooked at the point.	Dodo	*Raphus.*
Wings large enough for flight. Three toes only, all before.	XVI.	—— four genera.	1. The beak conical and curved.	Bustard	*Otis.*
			2. The beak strait, and thickest at the point.	Long-Legs	*Himantopus.*
				Oyster-catcher	*Ostralega.*
				Plover	*Pluvialis.*
Three toes before, and one behind.	XVII.	—— eighteen genera.	1. The beak strait, and thickest near the point.	Lapwing	*Vanellus.*
				Jacana	*Jacana.*
			2. The beak a little turned up, and somewhat flattened horizontally.	Turnstone	*Arenaria.*
			3. The beak convex above, and flattened laterally.	Pratincole	*Glareola.*
			4. The beak strait, and flattened laterally.	Rail	*Rallus.*
			5. The beak strait and slender.	Sandpiper	*Tringa.*
				Godwit	*Limosa.*
				Woodcock	*Scolopax.*
			6. The beak curved in an arc downwards.	Curlew	*Numenius.*
			7. The beak strait, flattened horizontally, and dilated at its extremity like a spatula.	Spoonbill	*Platea.*
			8. The beak long and thick.	Stork	*Ciconia.*
				Heron	*Ardea.*
				Umbre	*Scopus.*
			9. The beak short and thick, the upper mandible in the form of a spoon.	Boat-bill	*Cochlearius.*
			10. The beak short and strait, conical at the point; the head adorned with a crown of feathers.	Crown Bird	*Balearica.*
			11. The beak conical and curved.	Cariama	*Cariama.*
				Screamer	*Anhima.*
			12. The beak conical, flattened at the sides, and the fore-part of the head without feathers.	Gallinule	*Porphyrio.*
or WEB-FOOTED; that is, they have the toes furnished with membranes. The membranes of the feet divided. Four toes; three before and one behind, which are divided, and have membranous edges.	XVIII.	—— three genera.	1. The membranes of the toes simple, the beak strait and acute.	Water-Hen	*Gallinula.*
				Phalarope	*Phalaropus.*
			2. The membranes of the toes jagged.	Coot.	*Fulica.*
The membranes partly divided; the toes joined together near their base; the legs placed behind near the anus.	XIX.	—— one genus.	— — — — —	Grebe.	*Colymbus.*
The membranes entire. The legs placed behind near the anus. Three toes before, connected by a membrane; no toes behind.	XX.	—— three genera.	1. The beak strait and acute.	Guillemot.	*Uria.*
			2. The beak flattened at the sides, with transverse striæ.	Puffin.	*Fratercula.*
				Auk.	*Alca.*
Three toes before, connected by a membrane; one separate toe behind.	XXI.	—— three genera.	1. The beak strait, the extremity of the upper mandible bent.	Pinguin.	*Sphenis̃cus.*
				. . . .	*Catarractes.*
			2. The beak strait and acute.	Diver.	*Mergus.*
The legs placed in the middle of the body, and shorter than it. The three anterior toes connected by a membrane. Without a posterior toe.	XXII.	—— one genus.	—— —— —— ——	Albatross	*Albatrus.*
A fourth toe behind, separate from the others. Indented beak.	XXIII.	—— six genera.	1. The beak bent near its point.	Shearwater	*Puffinus.*
				Petrel.	*Procellaria.*
				Arctic Bird	*Stercorarius.*
				Gull	*Larus.*
			2. The beak flattened at the sides.	Tern	*Sterna.*
				Razorbill	*Rygchopsalia.*
Beak not indented.	XXIV.	—— three genera.	1. The beak rather cylindrical; the extremity of the upper mandible bent.	Merganser	*Merganser.*
			2. The beak convex on its upper part, and flat beneath.	Goose.	*Anser.*
				Duck	*Anas.*
The four toes connected by a membrane.	XXV.	—— five genera.	1. The beak acute.	Dartar	*Anhinga.*
				Tropic Bird	*Lepturus.*
			2. The beak hooked at the point.	Booby	*Sula.*
				Cormorant	*Phalacrocorax.*
				Pelican	*Onocrocalus.*
The legs longer than the body.	XXVI.	—— three genera.	1. The beak indented, curved in the middle, and the inferior mandible largest.	Flamingo	*Phœnicopterus.*
			2. The beak not indented.	Avoset	*Avocetta.*
				Courier	*Corrira.*

TABLE IV. *The Diviſion of Oviparous Quadrupeds*, by DAUBENTON.

OVIPAROUS QUADRUPEDS.	CLASS I. The body covered with a ſhell. TORTOISES.		Conſiſting of 15 ſpecies.
	CLASS II. The body naked, with a tail. LIZARDS.	Genus I. Lizards which have the body ſomewhat tuberculated, and the tail flat.	Conſiſting of 8 ſpecies.
		Genus II. Lizards which have the tail verticillated.	Conſiſting of 12 ſpecies.
		Genus III. Lizards which have the tail round, ſcaly, and ſhorter than the body.	Conſiſting of 5 ſpecies.
		Genus IV. Lizards which have the tail round, ſcaly, and longer than the body.	Conſiſting of 17 ſpecies.
		Genus V. Lizards which have four toes on the fore-feet, and the body ſmooth.	Conſiſting of 5 ſpecies.
		Genus VI. Winged Lizards.	The Dragon.
	CLASS III. The body naked, without a tail.	Genus I. Toads; the body round, and tuberculated, the legs ſhort.	Conſiſting of 14 ſpecies.
		Genus II. Frogs which have the body long.	Conſiſting of 11 ſpecies.
		Genus III. Frogs which have the toes terminating in a broad flat ſurface.	Conſiſting of 9 ſpecies.

Table V. *A Systematic Table of Oviparous Quadrupeds*, by M. de la Cepede.

		Divisions.	
CLASS I. Oviparous Quadrupeds, having a tail.	Genus I. Tortoises. The body covered with a shell.	I. The toes are very unequal, and assume, towards the extremities, the form of fins.	It consists of 6 species.
		II. The toes very short, and nearly equal.	It consists of 18 species.
	Genus II. Lizards. The body not covered with a shell.	I. The tail flat, and five toes on the fore-feet.	It consists of 11 species.
		II. The tail round, five toes on each foot, and scales rising on the back in the form of a crest.	It consists of 5 species.
		III. The tail round, five toes on the fore-feet, and scaly stripes running across the belly.	It consists of 7 species.
		IV. The tail round, and five toes on the fore-feet, but no scaly stripes under the belly.	It consists of 21 species.
		V. The under part of the toes covered with scales, rising over one another, like slates on the roof of a house.	It consists of 3 species.
		VI. Three toes on both the fore and the hinder feet.	It consists of 2 species.
		VII. Membranes, of the form of wings.	It consists of 1 species.
		VIII. Three or four toes on the fore-feet, and four or five toes on the hinder-feet.	It consists of 6 species.
CLASS II. Oviparous Quadrupeds, without a tail.	Genus I. Frogs. The head and body oblong, and either the one or the other angular.	— — — — — — — —	It consists of 12 species.
	Genus II. The body oblong, and balls of viscid matter under the toes.	— — — — — — — —	It consists of 7 species.
	Genus III. The body bloated and round.	— — — — — — — —	It consists of 14 species.
TWO-FOOTED REPTILES. — — —		I. Two fore-feet.	It consists of 1 species.
		II. Two hinder-feet.	It consists of 1 species.

Table VI. *The Diviſion of Serpents*, *by* Daubenton.

SERPENTS.	Genus I.	Rattle-ſnakes; or ſuch as have a Rattle at the extremity of the tail. Crotalus, Linnæi.	It conſiſts of four ſpecies.
	Genus II.	Serpents which have large ſcales (Scuta) beneath the body and tail; without a Rattle. Boa, Linn.	It conſiſts of ten ſpecies.
	Genus III.	Serpents which have large ſcales (Scuta) beneath the body, and ſmall ſcales (Squamæ) beneath the tail. Coluber, Linn.	It conſiſts of ninety-ſix ſpecies.
	Genus IV.	Serpents which have ſmall ſcales beneath the body and tail. Anguis, Linn.	It conſiſts of thirteen ſpecies.
	Genus V.	Serpents which have the body divided into annuli or rings. Amphiſbæna, Linn.	It conſiſts of two ſpecies.
	Genus VI.	Serpents which have the ſkin naked and ſmooth. Cæcilia, Linn.	It conſiſts of two ſpecies.

Table VII. *The Icthyologic System of* Gouan.

FISHES HAVE

EITHER The gills perfect,

Class I. Acanthopterygii. The fins supported by small bones.	Order I. Apodes. The ventral fins wanting.	1.	———	*Trichiurus*
		2.	Sword-fish	*Xiphias*
		3.	———	*Ophidium*
	Order II. Jugulares. The belly-fins placed beneath the neck.	1.	Weveer	*Trachinus*
		2.	———	*Uranosque*
		3.	Dragonet	*Callyonymus.*
		4.	Blenny	*Blennins.*
	Order III. Thoracici. The ventral fins placed beneath the breast.	1.	Goby	*Gobius*
		2.	———	*Cepola.*
		3.	Dolphin	*Coryphæna.*
		4.	Mackrel	*Scomber.*
		5.	Wrasse	*Labrus.*
		6.	Gilthead	*Sparus.*
		7.	———	*Chætodon.*
		8.	———	*Sciæna.*
		9.	Perch	*Perca.*
		10.	Father Lasher	*Scorpæna.*
		11.	Surmullet	*Mullus.*
		12.	Gurnard	*Trigla.*
		13.	Bull-head	*Cottus.*
		14.	Doree	*Zeus.*
		15.	———	*Trachipterus.*
		16.	Stickle-back	*Gasterosteus.*
	Order IV. Abdominales. The ventral fins placed beneath the abdomen.	1.	Catfish	*Silurus.*
		2.	Mullet	*Mugil.*
		3.	———	*Polynemus.*
		4.	———	*Theutys.*
		5.	———	*Elops.*
Class II. Malacopterygii. The fins soft, and without bones.	Order I. Apodes.	1.	Eel	*Muræna.*
		2.	Gymnotus	*Gymnotus.*
		3.	Wolf-fish	*Anarhichas.*
		4.	———	*Stromateus.*
		5.	Launce	*Ammodytes.*
	Order II. Jugulares.	1.	———	*Lepadogaster.*
		2.	Cod	*Gadus.*
	Order III. Thoracici.	1.	Flounder	*Pleuronectes.*
		2.	Sucking-fish	*Echeneis.*
		3.	———	*Lepidopus.*
	Order IV. Abdominales.	1.	———	*Loricaria.*
		2.	Atherine	*Atherina.*
		3.	Salmon	*Salmo.*
		4.	———	*Fistularia.*
		5.	Pike	*Esox.*
		6.	Argentine	*Argentina.*
		7.	Herring	*Clupea.*
		8.	Flying-fish	*Exocœtus.*
		9.	Carp	*Cyprinus.*
		10.	Loche	*Cobitis.*
		11.	———	*Amia.*
		12.	———	*Mormyrus.*

OR The gills imperfect.

Class III. Bronchiostegi.	Order I. Apodes.	1.	Pipe-fish	*Syngnathus.*
		2.	Balistes.	*Balistes.*
		3.	———	*Ostracion.*
		4.	———	*Tetraodon.*
		5.	Sun-fish	*Diodon.*
	Order II. Jugulares.	1.	Angler	*Lophius.*
	Order III. Thoracici.	1.	Lump-fish	*Cyclopterus.*
	Order IV. Abdominales.	1.	———	*Centriscus.*
		2.	———	*Pegasus.*

TABLE VIII. *The Entomologic Method of* GEOFFROY.

SECTIONS.	ARTICLES.	ORDERS.	GENERA.
SECT. I. Coleoptera, or Inſects with cruſtaceous ſhells over their wings.	I. . . . Either the ſhell is hard, and covers the whole abdomen; and their feet have . . .	I. . . . Either five articulations to all the feet, ſuch as the	*Platycerus.* *Ptilinus.* *Scarabæus.* *Copris.* *Attelabus.* *Dermeſtes.* *Byrrhus.* *Anthrenus.* *Ciſtela.* *Peltis.* *Cucujus.* *Elater.* *Bupreſtis.* *Bruchus.* *Lampyris.* *Cicindela.* *Omalyſus.* *Hydrophylus.* *Dyticus.* *Gyrinus.*
		II. . . . Or, four articulations to all the feet, ſuch as the	*Melolontha.* *Prionus.* *Cerambix.* *Leptura.* *Stenocorus.* *Luperus.* *Cryptocephalus.* *Crioceris.* *Altica.* *Galeruca.* *Chryſomela.* *Milabris.* *Rhinomacer.* *Curculio.* *Boſtrichus.* *Clerus.* *Anthribus.* *Scolytus.* *Caſſida.* *Anaſpis.*
		III. . . . Or, three articulations to all the feet, ſuch as . . .	*Coccinella.* *Tritoma.*
		IV. . . . Or, five articulations in the two firſt pair of feet, and four only in the hinder pair, ſuch as . . .	*Diaperis.* *Pyrochroa.* *Cantharis.* *Tenebrio.* *Mordella.* *Notoxus.* *Cerocoma.*
	II. . . . Or the ſhell is hard, and covers only part of the abdomen; and their feet have.	I. . . . Either five articulations to all the feet, ...	*Staphylinus.*
		II. . . . Or four articulations to all the feet, ...	*Necydalis.*
		III. . . . Or three articulations to all the feet, ...	*Forſicula.*
		IV. . . . Or five articulations to the two firſt pair of feet, and four to the latter,	*Meloe.*
	III. . . . The ſhell is ſoft, and their feet have	I. . . . Either five articulations to the two firſt pair of feet, and four only to the latter, ...	*Blatta.*
		II. . . . Or two articulations to all the feet.	*Trips.*
		III. . . . Or three articulations to all the feet, ...	*Gryllus.* *Acrydium.*
		IV. . . . Or four articulations to all the feet, ...	*Locuſta.*
		V. . . . Or five articulations to all the feet, ...	*Mantes.*

SECTIONS.	ARTICLES.	GENERA.
II. . . . Hemyptera, or inſects whoſe upper wings are half cruſtaceous, half membranaceous, ...		*Cicada.* *Cimex.* *Naucoris.* *Notonecta.* *Corixa.* *Hepa.* *Pſylla.* *Aphis.* *Chermes.* *Coccus.*
III. . . . Inſects with four farinaceous wings, ...		*Papilio.* *Sphinx.* *Pterephorus.* *Phalæna.* *Tinæ.*
IV. . . . Inſects with four naked membranaceous wings.	I. . . Three articulations to the feet. .	*Libellula.* *Perla.*
	II. . . Four articulations to the feet. . .	*Ruphidia.*
	III. . . Five articulations to the feet. . .	*Ephemera.* *Phryganea.* *Hemerobius.* *Formicaleo.* *Panorpa.* *Crabro.* *Urocerus.* *Tenthredo.* *Cynips.* *Diplolepis.* *Eulophus.* *Ichneumon.* *Veſpa.* *Apis* *Formica.*
V. . . . Inſects with two wings, ...		*Oeſtrus.* *Tabanus.* *Aſilus.* *Stratiomys.* *Muſca.* *Stomoxys.* *Volucella.* *Nemotelus* *Scatopſe.* *Hyppoboſca.* *Tipula.* *Bibio.* *Culex.*
VI. . . . Inſects without wings, ...		*Pediculus.* *Pedura.* *Forbicina.* *Pulex.* *Chelifer.* *Acarus.* *Phalangium.* *Aranea.* *Monoculus.* *Binoculus.* *Cancer.* *Oniſcus.* *Aſellus.* *Scolopendra.* *Iulus.*

A TABLE, EXHIBITING THE CHEMICAL NOMENCLATURE

Proposed by Messieurs De MORVEAU, LAVOISIER, BERTHOLLET, and De FOURCROY, in May 1787.

	I. SUBSTANCES THAT HAVE NOT BEEN YET DECOMPOSED.		II. THE SAME SUBSTANCES REDUCED INTO THE STATE OF GAS BY THE ADDITION OF CALORIC.		III. THE SAME SUBSTANCES COMBINED WITH OXIGENE.		IV. THE SAME SUBSTANCES IN AN OXIGENATED GAZEOUS STATE.		V. THESE OXIGENATED SUBSTANCES NEUTRALIZED BY THE ADDITION OF BASES.		VI. THE SAME PRIMARY SUBSTANCES COMBINED WITH OTHER SUBSTANCES, BUT NOT ACIDIFIED.		
	NAMES NEWLY INVENTED OR ADOPTED.	ANCIENT NAMES.	NAMES NEWLY INVENTED OR ADOPTED.	ANCIENT NAMES.	NAMES NEWLY INVENTED OR ADOPTED.	ANCIENT MAMES.	NAMES NEWLY INVENTED OR ADOPTED.	ANCIENT NAMES.	NAMES NEWLY INVENTED OR ADOPTED.	ANCIENT NAMES.	NAMES NEWLY INVENTED OR ADOPTED.	ANCIENT NAMES.	
1	Light	— —	—	— —	—	— —	—	— —	—	— —	—	— —	1
2	Caloric	*Latent heat*, or *matter of heat.*	—	— —	—	— —	—	— —	—	— —	—	— —	2
3	Oxigene	*The base of vital air.*	Oxigenous gas. *N.B.* It appears that light contributes to the reduction of oxigene into a gazeous state.	*Dephlogisticated* or *vital air.*	—	— —	—	— —	—	— —	—	— —	3
4	Hydrogene.	*The base of inflammable gas.*	Hydrogenous gas.	*Inflammable gas.*	Water.	*Water.*	—	— —	—	— —	—	— —	4
5	Azote, *or* the radical principle of the nitrid acid.	*The base of phlogisticated air*, or *of atmospheric mephitis.*	Gas azote.	*Phlogisticated air*, or *atmospheric mephitis.*	The base of nitrous gas. Nitric acid. *With an excess of azote,* Nitrous acid.	*The base of nitrous gas.* *White nitrous acid.* *Fuming nitrous acid.*	Nitrous gas. Nitrous acid gas.	— —	Nitrate of potash. of soda, &c. Nitrite of potash.	*Common nitre.* *Cubic nitre.*	—	— —	5
6	Carbone, *or* the radical principle of the carbonic acid.	*Pure coal.*	—	— —	Carbonic acid.	*Fixed air*, or *cretaceous acid.*	Carbonic acid gas.	*Fixed air, mephitic air.*	Carbonate of lime. of potash, &c. of iron, &c.	*Chalk.* *Effervescent alkalis.* *Rust of iron, &c.*	Carbure of iron.	*Plumbago.*	6
7	Sulphur, *or* the radical principle of the sulphuric acid.	— —	—	— —	Sulphuric acid. *With less oxigene,* Sulphureous acid.	*Vitriolic acid.* *Sulphureous acid.*	Sulphureous acid gas.	*Sulphureous acid gas.*	Sulphate of potash. of soda. of lime. of alumine. of barytes. of iron, &c. Sulphite of potash, &c.	*Vitriolated tartar* *Glauber salt.* *Selenite.* *Alum.* *Ponderous spar.* *Vitriol of iron.* *Stahl's sulphureous salt.*	Sulphure of iron. of antimony of lead. Sulph hydrogenous gas. Sulphure of potash. Sulphure of soda. Alkal. sulphures with metals suspended in them. Alkaline sulphure with carbonaceous matters suspended in it.	*Factititious iron pyrites* *Antimony.* *Galena.* *Hepatic gas.* *Alkaline livers of sulphur.* *Metallic livers of sulphur.* *Liver of sulphur with carbonaceous matters suspended in it.*	7
8	Phosphore, *or* the radical principle of the phosphoric acid.	— —	—	— —	Phosphoric acid. *With a smaller proportion of oxigene,* Phosphorous acid.	*Phosphoric acid.* *Fuming*, or *volatile phosphoric acid.*	—	— —	Phosphate of soda. Calcareous phosphate. Supersaturated phosphate of soda. Phosphite of potash, &c.	*Phosphoric salt, with a base of natrum.* *Earth of bones.* *Haupt's sal perlatum.*	Phosphorised hydrogenous gas. Phosphure of iron.	*Phosphoric gas.* *Syderite.*	8
	ACIDIFIABLE BASES.												
9	Radical principle of the muriatic acid.	— —	—	— —	Muriatic acid. *With an excess of oxigene.* Oxigenated muriatic acid	*Marine acid.* *Dephlogisticated marine acid.*	Muriatic acid gas. Oxigenated muriatic acid gas	*Marine acid gas.* *Dephlogisticated marine acid gas.*	Muriate of potash. Muriate of soda. Calcareous muriate, &c. Ammoniacal muriate. Oxigenated muriate of soda, &c.	*Febrifuge salt of Sylvius.* *Marine salt.* *Calcareous marine salt.* *Sal ammoniac.*	—	— —	9
10	Radical principle of the boracic acid.	— —	—	— —	Boracic acid.	*Sedative salt.*	—	— —	Borate supersaturated with soda, *or* borax. Borate of soda, &c. *soda saturated with the acid.*	*Common borax.*	—	— —	10
11	Radical principle of the fluoric acid.	—	—	— —	Fluoric acid.	*Acid of spar.*	Fluoric acid gas.	*Spathose gas.*	Fluate of lime, &c.	*Fluor spar.*	—	— —	11
12	Radical principle of the succinic acid.	—	—	— —	Succinic acid.	*Volatile salt of amber.*	—	— —	Succinate of soda, &c.		—	— —	12
13	Radical principle of the acetic acid.	— —	—	— —	Acetous acid. *With more oxigene,* Acetic acid.	*Distilled Vinegar.* *Radical vinegar.*	—	— —	Acetite of potash. of soda. of lime. of ammoniac. of lead. of copper. Acetate of soda, &c.	*Terra foliata tartari.* *Mineral terra foliata.* *Calcareous acetous salt.* *Spirit of Mendererus.* *Sacharum saturni.* *Verdegris.*	—	— —	13
14	Radical principle of the tartareous acid.	— —	—	— —	Tartareous acid.	— —	—	— —	Acidulous tartarite of potash. Tartarite of potash. Tartarite of soda, &c.	*Cream of tartar.* *Vegetable salt.* *Salt of Seignette.*	—	— —	14
15	Radical principle of the pyro-tartareous acid.	— —	—	— —	Pyro-tartareous acid.	*Empyreumatic tartareous acid*, or *spirit of tartar.*	—	— —	Pyro-tartarite of lime. Pyro-tartarite of iron, &c.	— —	—	— —	15
16	Radical principle of the oxalic acid.	— —	—	— —	Oxalic acid.	*Saccharine acid.*	—	— —	Acidulous oxalate of potash. Oxalate of lime. of soda, &c.	*Salt of Sorrel.*	—	— —	16
17	Radical principle of the gallic acid.	— —	—	— —	Gallic acid.	*Astringent principle.*	—	— —	Gallate of soda. of magnesia. of iron, &c.	— —	—	— —	17
18	Radical principle of the citric acid.	— —	—	— —	Citric acid.	*Lemon juice.*	—	— —	Citrate of potash. of lead. &c.	*Terra foliata with lemon juice.*	—	— —	18
19	Radical principle of the malic acid.	— —	—	— —	Malic acid.	*Acid of apples.*	—	— —	Malate of lime, &c.	— —	—	— —	19
20	Radical principle of the benzoic acid.	— —	—	— —	Benzoic acid.	*Flowers of benzoin.*	—	— —	Aluminous benzoate. Benzoate of iron, &c.	— —	—	— —	20
21	Radical principle of the pyro-ligneous acid.	— —	—	— —	Pyro-ligneous acid.	*Spirit of wood.*	—	— —	Pyro-lignite of lime. Pyro lignite of zinc, &c.	—	—	— —	21
22	Radical principle of the pyro-mucous acid.	— —	—	— —	Pyro mucous acid.	*Spirit of honey, sugar*, &c.	—	— —	Pyro-mucite of magnesia. Ammoniacal, &c. pyro-mucite.	—	—	— —	22
23	Radical principle of the camphoric acid.	— —	—	— —	Camphoric acid.	— —	—	— —	Camphorate of soda, &c.	— —	—	— —	23
24	Radical principle of the lactic acid.	— —	—	— —	Lactic acid	*Acid of milk.*	—	— —	Lactate of lime, &c.	— —	—	— —	24
25	Radical principle of the saccho-lactic acid.	— —	—	— —	Saccho-lactic acid.	*Acid of sugar of milk.*	—	— —	Saccho-lactate of iron, &c.	— —	—	— —	25
26	Radical principle of the formic acid.	— —	—	— —	Formic acid.	*Acid of ants.*	—	— —	Ammoniacal, &c. formiate.	*Spirit of magnanimity.*	—	— —	26
27	Radical principle of the Prussic acid.	— —	—	— —	Prussic acid.	*Colouring matter of Prussian blue.*	—	— —	Prussiate of potash, &c. Prussiate of iron, &c.	*Phlogisticated alkali*, or *Prussian alkali.* *Prussian blue.*	—	— —	27
28	Radical principle of the sebacic acid.	— —	—	— —	Sebacic acid.	*Acid of grease.*	—	— —	Sebate of lime, &c.	— —	—	— —	28
29	Radical principle of the lithic acid.	— —	—	— —	Lithic acid	*Stone in the bladder.*	—	— —	Lithiate of soda, &c.	— —	—	— —	29
30	Radical principle of the bombic acid.		—	— —	Bombic acid.	*Acid of the silk-worm.*	—	— —	Bombiate of iron, &c.	— —	—	— —	30
							OXIDES WITH VARIOUS BASES *.						
	METALLIC SUBSTANCES.												
31	Arsenic	*Regulus of arsenic.*	—	— —	Oxide of arsenic. *With more oxigene.* Arsenic acid	*White arsenic*, or *calx of arsenic.* *Arsenical acid.*	Yellow sulphurated oxide of arsenic. Red sulphurated oxide of arsenic. Arsenical oxide of potash.	*Orpiment.* *Realgar.* *Liver of arsenic.*	Arseniate of potash, &c. Arseniate of copper.	*Macquer's arsenical neutral salt.*	Alloy of arsenic and tin.	*Arsenicated tin.*	31
32	Molybdena.	— —	—	— —	Oxide of molybdena. Molybdic acid.	*Calx of molybdena.*	Sulphure of molybdena.	*Molybdena.*	Molybdate.	— —	Alloy, &c.	— —	32
33	Tungsten.	— —	—	— —	Oxide of tungsten. Tunstic acid.	*Yellow calx of tungsten.*	—	— —	Calcareous tunstate.	*Swedish tunsten.*	Alloy, &c.	— —	33
34	Manganese.	*Regulus of manganese.*	—	— —	White, Black, Vitreous oxide of manganese.	*Manganese.*	—	— —	—	— —	Alloy of manganese and iron.	— —	34
35	Nickel.	— —	—	— —	Oxide of nickel.	*Calx of nickel.*	—	— —	—	— —	Alloy of nickel, &c.	— —	35
36	Cobalt	*Regulus of cobalt.*	—	— —	Grey, Vitreous oxide of cobalt.	*Calx of cobalt*	Alkaline cobaltic oxides.	*Precipitates of cobalt again dissolved by alkalies*	—	— —	Alloy, &c.	— —	36
37	Bismuth.	— —	—	— —	White, Yellow, Vitreous oxide of bismuth.	*Magistery of bismuth*, or *white paint.* *Yellow calx of bismuth.* *Glass of bismuth.*	Sulphurated oxide of bismuth.	*Bismuth precipitated by liver of sulphur.*	—	— —	Alloy, &c.	— —	37
38	Antimony	*Regulus of antimony.*	—	— —	White oxide of antimony by the nitrous acid. by the muriatic acid. sublimated. vitreous.	*Diaphoretic antimony.* *Powder of Algarotti.* *Flowers*, or *snow of antimony.* *Glass of regulus of antimony.*	Grey, Red, Orange, Vitreous sulphurated oxide of antimony. Alkaline oxide of antimony.	*Grey calx of antimony.* *Kermes mineral.* *Golden sulphur.* *Glass and liver of antimony.* *Rotrou's solvent.*	—	— —	Alloy, &c.	— —	38
39	Zinc.	— —	—	— —	Oxide of zinc. Sublimated oxide of zinc.	*Calx of zinc.* *Flowers of zink, pompholix*, &c.	Sulphurated oxide of zinc.	*Precipitate of zinc by liver of sulphur* or *factitious blende.*	—	— —	Alloy, &c.	— —	39
40	Iron.	— —	—	— —	Black, Red oxide of iron.	*Martial æthiops.* *Astringent saffron of Mars.*	Sulphurated oxide of iron.	— —	—	— —	Alloy, &c.	— —	40
41	Tin.	— —	—	— —	White oxide of tin.	*Calx* or *putty of tin.*	Yellow sulphurated oxide of tin.	*Aurum mussivum.*	—	— —	Alloy, &c.	— —	41
42	Lead.	— —	—	— —	White, Yellow, Red, Vitreous oxide of lead.	*Ceruse*, or *white lead.* *Massicot.* *Minium.* *Litharge.*	Sulphurated oxide of lead.	—	—	— —	Alloy, &c.	— —	42
43	Copper.	— —	—	— —	Red, Green, Blue oxide of copper.	*Brown calx of copper.* *Green calx of copper*, or *verdegris.* *Mountain blue.*	Ammoniacal oxide of copper.	—	—	— —	Alloy, &c.	— —	43
44	Mercury.	— —	—	— —	Blackish, Yellow, Red mercurial oxide.	*Æthiops* per se. *Turbith mineral.* *Precipitate* per se.	Black, Red sulphurated oxide of mercury.	*Æthiops mineral.* *Cinnabar.*	—	— —	Alloy *or* amalgam of &c.	— —	44
45	Silver.	— —	—	— —	Oxide of silver.	*Calx of silver.*	Sulphurated oxide of silver.	—	—	— —	Alloy, &c.	— —	45
46	Platina.	— —	—	— —	Oxide of platina.	*Calx of platina.*	—	— —	—	— —	Alloy, of platina & gold.	— —	46
47	Gold.	— —	—	— —	Oxide of gold.	*Calx of gold.*	—	— —	—	— —	Alloy, &c.	— —	47
	EARTHS.												
48	Silex.	*Vitrifiable earth, quartz, &c.*	—	— —	—	— —	—	— —	—	— —	—	— —	48
49	Alumine.	*Clay*, or *earth of alumn.*	—	— —	—	— —	—	— —	—	— —	—	— —	49
50	Barytes.	*Terra ponderosa.*	—	— —	—	— —	—	— —	—	— —	—	— —	50
51	Lime.	*Calcareous earth.*	—	— —	—	— —	—	— —	—	— —	—	— —	51
52	Magnesia.	— —	—	— —	—	— —	—	— —	—	— —	—	— —	52
	ALKALIES.												
53	Potash.	*Vegetable fixed alkali of tartar, &c.*	—	— —	—	— —	—	— —	—	— —	—	— —	53
54	Soda.	*Mineral alkali, marine alkali, natrum.*	—	— —	—	— —	—	— —	—	— —	—	— —	54
55	Ammoniac.	*Fluor*, or *caustic volatile alkali.*	Ammoniacal gas.	*Alkaline gas.*	—	— —	—	— —	—	— —	—	— —	55

* As the substances in the lower part of the column cannot be reduced into a gazeous state, and not only they, but several of those in the upper part: we have therefore changed at this place the title of the column, and substituted another, which expresses the peculiar combinations of the metals.

Denominations newly appropriated to several Substances, which are more compound in their Nature, yet enter into new Combinations without being decomposed.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
New Names	Mucous matter.	Glutinous matter, *or* gluten.	Sugar.	Starch.	Fixed oil.	Volatile oil.	The aroma, *or* aromatous principle.	Resin.	Extractive matter.	Extracto-resinous matter, in which the extractive matter predominates.	Resino-extractive matter, in which the resin predominates.	Feculum.	Alcohol or spirit of wine.	Alcohol of potash. of guaiacum. of scammoneum. of myrrh, &c.	Nitrous, Gallic, Muriatic alcohol.	Sulphuric, Muriatic, Acetic, &c. ether.	Alkaline, Earthy, Acid, Metallic soaps. Saponula of turpentine, &c.
Ancient Names.	*Mucilage.*	*Glutinous matter.*	*Saccarine matter.*	*Amylaceous matter.*	*Fat oil.*	*Essential oil.*	*Spiritous rector.*	*Resin.*	*Extractive matter.*			*Feculum.*	*Spirit of wine.*	*Alkaline tincture.* *Tincture of guaiacum.* ——— *of scammonium.* ——— *of myrrh, &c.*	*Dulcified spirit of nitre.* *Tincture of nut galls.* *Dulcified marine acid.*	*Ether of Frobenius,* *Marine ether.* *Acetous ether.*	*Alkaline, earthy, &c. soaps.* *Combinations of volatile oils with bases.*

ADVERTISEMENT

CONCERNING THE

TWO TABLES OF SYNONYMOUS NAMES.

TO our general table of the ſyſtematic Nomenclature, exhibiting the whole of our ſyſtem, we have thought proper to add a liſt of ſynonyma, containing all the words neceſſary in denominating chemical preparations. This liſt of ſynonyma is given in the form of two vocabularies. In the firſt of theſe, are the old names, diſpoſed in alphabetical order; and oppoſite to them, the correſpondent, new, or newly adopted names. This vocabulary not only ſhews the names which we have given to the different chemical compounds; but perſons not very well acquainted with the preparations in general, the old names of which do not at all explain their nature, will find, in the new ſynonymous words, a ſort of definition of the ſubſtances to which they are affixed, ſufficiently plain and diſtinct, to enable them to underſtand their natures.

In the ſecond vocabulary, the order of the new and the old names is directly contrary to that of the firſt; and we hope it will be found no leſs uſeful.

In it, the new names appear in alphabetical order, and oppoſite to them, are exhibited the correſponding

old names. In this, our object was, to give a complete liſt of ſynonymous terms, in order that ſtudents might not, in this ſcience, be under the ſame difficulties as in ſome others, particularly in Mineralogy and Botany, in which the vaſt variety of different names given to the ſame thing, has produced a degree of confuſion and obſcurity, which the labours of ſome of the moſt indefatigable men have not been ſufficient to remove.

In this new vocabulary, we ſhew that the ſame ſubſtance has frequently received eight, ten, or twelve different names; that moſt of theſe names bear no relation to the things to which they are affixed;—which indeed could not but happen in a ſcience in which the firſt writers ſought to conceal every thing under a veil of myſtery; and in the hiſtory of which we cannot trace the ſeveral periods at which thoſe who have cultivated it, have attained an accurate knowledge of the different compounds. But, to avoid tedioufneſs and obſcurity, we have taken care not to exhibit here, the names anciently given to different ſubſtances by the alchemiſts, which, as they were founded on abſurd or chimerical ideas, have happily been forgotten ſince chemiſtry has begun to make equal progreſs with Natural Philoſophy.

Each of theſe tables of ſynonyma, therefore, has its uſe. The firſt may be uſed as a dictionary in reading books on chemiſtry, that have been publiſhed before this period, as it gives the new name correſponding to every old name which can occur in ſuch works. In this, as well as in the following, we have given only the names of ſimpler compound bodies, and of chemical preparations. The names of the operations we have not given, as we have made no change upon them. The

second list of synonyma contains more words than the first; for in it, there are a good many compounds, the knowledge of which we owe to late experiments, and which, till within these few years, had no names. It may therefore be considered as being in some degree an inventory of the chemical knowledge which we at present possess.

In both these lists, there are some synonymous words among the new names. We retain them, because some of them are very generally used, and because some choice of expressions with different terminations is necessary to give variety to discourse, and to prevent a disgusting monotony. Thus, for instance, the word expressive of the base of neutral salts, may be either a substantive or an adjective, at the pleasure of the writer. In books on chemistry, there may be some words found that do not appear in our vocabularies; but the nature of the compounds to which they have been applied, is not yet well known; and those who consider to what strict laws we have here subjected ourselves, will readily be sensible, that it would have been impossible for us to give names to combinations but imperfectly known.

We have added some definitions to several general or particular names, either when we have been doubtful of the nature of the compounds to which they belong, or in speaking of bodies but lately discovered. The second table, which exhibits the new names in alphabetical order, with the corresponding old names, gives at the same time a Latin translation of the new names: In making out this translation, we have still adhered to the same rules. Uniformity of termination, and the laws of derivation, are the two principles by which we have been

uniformly directed. Our Nomenclature would have been imperfect, if we had neglected to offer to philoſophers of all nations an uniform mode of expreſſing themſelves, which might make them generally underſtood. As the ſcience improves, ſuch new names as ſhall become neceſſary may be added upon the ſame plan.

COMPA-

COMPARATIVE VIEW

OF

ANCIENT and MODERN NAMES

OF

CHEMICAL SUBSTANCES,

IN ALPHABETICAL ORDER.

Old Names.	*New or adopted Names.*
	A
ACETATED Ammoniac.	Acetite, ammoniacal. Acetite of ammoniac.
Acetated lime.	Acetite, calcareous. Acetite of lime.
Acetated clay.	Acetite, aluminous. Acetite of alumine.
Acetated copper.	Acetite of copper.
Acetated magnesia.	Acetite, magnesian. Acetite of magnesia.
Acetated lead.	Acetite of lead.
Acetated soda.	Acetite of soda.
Acetated potash.	Acetite of potash.
Acetated zinc.	Acetite of zinc.
Acetated iron.	Acetite of iron.
Acetated mercury.	Acetite of mercury. Acetite, mercurial.

Old Names.	A	New Names.
Acid, acetous.		Acid, acetous.
Acid, aerial.		Acid, carbonic.
Acid, arſenical.		Acid, arſenic.
Acid of benzoin.		Acid, benzoic.
Acid of borax.		Acid, boracic.
Acid, carbonaceous.		Acid, carbonic.
Acid of citrons.		Acid, citric.
Acid, cretaceous.		Acid, carbonic.
Acid of ants.		Acid, formic.
Acid of apples.		Acid, malic.
Acid, benzonic.		Acid, benzoic.
Acid of ſalt.		Acid, muriatic.
Acid of ſulphur.		Acid, ſulphuric.
Acid of amber.		Acid, ſuccinic.
Acid of ſugar.		Acid, oxalic.
Acid of tallow.		Acid, ſebacic.
Acid of vinegar.		Acid, acetous.
Acid of Wolfram, according to Meſſrs D'Elhuyar.		Acid, tunſtic.
Acid, fluoric.		Acid, fluoric.
Acid, formicine.		Acid, formic.
Acid, galactic.		Acid, lactic.
Acid, gallic.		Acid, gallic.
Acid, lignic.		Acid, pyro-ligneous.
Acid, lithiaſic.		Acid, lithic.
Acid, maluſian.		Acid, malic.
Acid, marine.		Acid, muriatic.
Acid, dephlogiſticated marine.		Acid, oxigenated muriatic.
Acid, mephitic.		Acid, carbonic.
Acid, molybdic.		Acid, molybdic
Acid, white nitrous.		Acid, nitric.
Acid, nitrous, without gas.		Acid, nitric.
Acid, dephlogiſticated nitrous.		Acid, nitric.
Acid, phlogiſticated nitrous.		Acid, nitrous.
Acid, oxaline.		Acid, oxalic.
Acidum perlatum.		Superſaturated phoſphate of ſoda.
Acid, dephlogiſticated phoſphoric.		Acid, phoſphoric.
Acid, phlogiſticated phoſphoric.		Acid, phoſphorous.
Acid, ſaccharine.		Acid, oxalic.
Acid, ſacchalactic.		Acid, ſaccho-lactic.
Acid, ſebaceous.		Acid, ſebacic.
Acid, ſedative.		Acid, boracic.
Acid, ſparry.		Acid, fluoric.

Old Names.	A New Names.
Acid, ſulphureous.	Acid, ſulphureous.
Acid, ſyrupous.	Acid, pyro mucous.
Acid, tartareous.	Acid, tartareous.
Acid, tungſtic.	Acid, tunſtic.
Acid, vitriolic.	Acid, ſulphuric.
Acid, phlogiſticated vitriolic.	Acid, ſulphureous.
Acidum pingue.	Imaginary principle of Meyer.
Affinities.	Chemical affinities or attractions.
Aggregation.	Aggregation.
Aggregates.	Aggregates.
Air, vitriolic acid.	Sulphureous acid gas.
Air, alkaline.	Ammoniacal gas.
Air, dephlogiſticated.	Oxigenous gas, *or* vital air.
Air, atmoſpheric.	Atmoſpheric air.
Air of fire, Scheele's.	Oxigenous gas.
Air, factitious.	Carbonic acid gas.
Air, fixed.	Carbonic acid gas.
Air, impure.	Azotic gas.
Air, inflammable.	Hydrogenous gas.
Air of ſulphur, ſtinking.	Sulphurated hydrogenous gas.
Air, putrid.	
Air of Hales, ſolid.	Carbonic acid gas.
Air, vitiated.	Gas azote.
Air, vital.	Oxigenous gas.
Alkaheſt.	Univerſal ſolvent, the exiſtence of which was ſuppoſed by the Alchemiſts.
Alkaheſt of Reſpour.	Potaſh mixed with oxide of zinc.
Alkaheſt of Van Helmont.	Carbonate of potaſh.
Alkalis, in general.	Alkalis.
Alkali of tartar, fixed, not cauſtic.	Carbonate of potaſh.
Alkalis, cauſtic.	Alkalis.
Alkalis, effervefcent.	Alkaline carbonates.
Alkali of tartar, fixed, cauſtic.	Potaſh.
Alkali, vegetable fixed.	Carbonate of potaſh.
Alkali, cauſtic marine.	Soda.
Alkali, marine, not cauſtic.	Carbonate of ſoda.
Alkali, aerated mineral	Carbonate of ſoda.
Alkali, cauſtic mineral.	Soda.
Alkali, effervefcent mineral.	Carbonate of ſoda.
Alkali, phlogiſticated.	Ferruginous pruſſiate of potaſh, not ſaturated.
Alkali, Pruſſian.	Ferruginous pruſſiate of potaſh.
Alkali, aerated vegetable.	Carbonate of potaſh.

Old Names. A	New Names.
Alkali, caustic vegetable.	Potash.
Alkali, caustic volatile.	Ammoniac.
Alkali, concrete volatile.	Ammoniacal carbonate.
Alkali, effervescent volatile.	Ammoniacal carbonate.
Alkali, fluor volatile.	Ammoniac.
Alkali, urinous.	Ammoniac.
Alloy of Metals.	Alloy.
Alum.	Sulphate of alumine. Aluminous sulphate.
Alum, marine.	Muriate of alumine. Aluminous muriate.
Alum, nitrous.	Nitrate of alumine. Aluminous nitrate.
Amalgam of silver.	Amalgam of silver.
Amalgam of bismuth.	Amalgam of bismuth.
Amalgam of copper.	Amalgam of copper.
Amalgam of tin.	Amalgam of tin.
Amalgam of gold.	Amalgam of gold.
Amalgam of lead.	Amalgam of lead.
Amalgam of zinc.	Amalgam of zinc.
Amber yellow.	Amber.
Ammoniac, arsenical.	Ammoniacal arseniate. Arseniate of ammoniac.
Ammoniac, cretaceous.	Ammoniacal carbonate. Carbonate of ammoniac.
Ammoniac, nitrous.	Ammoniacal nitrate. Nitrate of ammoniac.
Ammoniac, phosphoric.	Ammoniacal phosphate. Phosphate of ammoniac.
Ammoniac, sparry.	Ammoniacal fluate. Fluate of ammoniac.
Ammoniac, tartareous.	Ammoniacal tartarite. Tartarite of ammoniac.
Ammoniac, vitriolic.	Ammoniac sulphate. Sulphate of ammoniac.
Antimony, ore of.	Native sulphure of antimony.
Antimony, crude.	Sulphure of antimony.
Antimony, diaphoretic.	White oxide of antimony by nitre.
Aqua stygia.	Nitro-muriatic acid by ammoniacal muriate.
Aquila alba.	Mild sublimated mercurial muriate.
Arcanum duplicatum.	Sulphate of potash.
Arsenic, regulus of.	Arsenic.

Old Names.	A	New Names.
Arsenic, white calx of.		Oxide of arsenic.
Arsenic, red.		Red sulphurated oxide of arsenic.
Arseniate of potash.		Arseniate of potash.
Attractions, elective.		Elective attractions.
Azure of cobalt, or of four fires.		Vitreous oxide of cobalt with siliceous earth.
	B	
Barotes.		Barytes.
Barotes, effervescent.		Carbonate of barytes.
Base of vital air.		Oxygene.
Base of marine salt.		Soda.
Balsams of Bucquet. See the new Nomenclature.		Balsams.
Balsam of sulphur.		Sulphure of volatile oil.
Benzoin.		Benzoin.
Benzones.		Benzoates.
Butter of antimony.		Sublimated muriate of antimony.
Butter of arsenic.		Sublimated muriate of arsenic.
Butter of bismuth.		Sublimated muriate of bismuth.
Butter of tin.		Sublimated muriate of tin.
Baume's solid butter of tin.		Concrete muriate of tin.
Butter of zinc.		Sublimated muriate of zinc.
Bezoar mineral.		Oxide of antimony.
Bismuth.		Bismuth.
Bitumens.		Bitumens.
Blende, or *false galena.*		Sulphure of zinc.
Blue, Berlin.		Prussiate of iron.
Blue, Prussian.		Prussiate of iron.
Borax, ammoniacal.		Ammoniacal borate.
Borax, argillaceous.		Aluminous borate. Borate of alumine.
Borax, crude.		Borate of soda, *or* borate supersaturated with soda.
Borax, calcareous.		Calcareous borate. Borate of lime.
Borax of antimony.		Borate of antimony.
Borax of cobalt.		Borate of cobalt.
Borax of copper.		Borate of copper.
Borax of zinc.		Borate of zinc.
Borax, magnesian.		Magnesian borate. Borate of magnesia.

Old Names.	New Names.
	C
Borax, martial.	Borate of iron.
Borax, mercurial.	Borate of mercury.
Borax, ponderous or *barotic.*	Barytic borate. Borate of barytes.
Borax, vegetable.	Borate of potash.
Brass, bronze.	Alloy of copper and tin, brass, *or* bronze.

C

Old Names.	New Names.
Calculus, urinary.	Lithic acid.
Cameleon, mineral.	Oxide of manganese and potash.
Camphor.	Camphor.
Camphorites, (salts.)	Camphorates.
Causticum.	Imaginary principle of Meyer.
Ceruse.	White oxide of lead by acetous acid, *mixed with chalk.*
Ceruse of antimony.	White oxide of antimony by precipitation.
Coal, pure.	Carbone.
Calx of antimony, vitrified.	Vitreous oxide of antimony.
Calces, metallic.	Metallic oxides.
Cinnabar.	Redsulphuratedoxideofmercury
Citrates, (salts.)	Citrates.
Cobalt, or *cobolt.*	Cobalt.
Colcothar.	Redoxideofironbysulphuricacid
Copperas, white.	Sulphate of zinc.
Copperas, green.	Sulphate of iron.
Copperas, blue.	Sulphate of copper.
Chalk, ammoniacal.	Ammoniacal carbonate.
Chalk, barotic.	Barytic carbonate.
Chalk of lead.	Carbonate of lead.
Chalk of soda.	Carbonate of soda.
Chalk of zinc.	Carbonate of zinc.
Chalk, magnesian.	Magnesian carbonate. Carbonate of magnesia.
Chalk, martial.	Carbonate of iron.
Chalk, or *calcareous spar.*	Calcareous carbonate. Carbonate of lime.
Clay.	Argilla, mixture of alumine and silex.
Clay, pure.	Alumine *or* alumines.
Clay, cretaceous.	Aluminous carbonate. Carbonate of alumine.

Old Names.	New Names.
	D
Clay, sparry.	Aluminous fluate. Fluate of alumine.
Cream of lime.	Calcareous carbonate.
Cream or crystals of tartar.	Acidulous tartarite of potash.
Crystal mineral.	Nitrite of potash, mixed with sulphate of potash.
Crystals of soda.	Crystallised carbonate of potash.
Crystals of the moon.	Crystallised nitrate of silver.
Crystals of Venus.	Crystallised acetite of copper.
Crocus metallorum.	Semi-vitreous sulphurate oxide of antimony.
Copper.	Copper.
Copper, yellow.	Alloy of copper and zinc, *or* latten.
	D
Diamond.	Diamond.
	E
Emetic.	Antimonial tartarite of potash.
Empyreal air.	Oxigenous gas.
Essences.	Volatile oils.
Ether, acetous.	Acetic æther.
Ether, marine.	Muriatic æther.
Ether, nitrous.	Nitric æther.
Ether, vitriolic.	Sulphuric æther.
Ethiops, martial.	Black oxide of iron.
Ethiops, mineral.	Black sulphurated oxide of mercury.
Ethiops per se.	Blackish mercurial oxide.
Extract.	Extractive principle.
	F
Feculum of plants.	Feculum.
Flowers, ammoniacal of copper.	Sublimated ammoniacal muriate of copper.
Flowers, martial ammoniacal.	Sublimated ammoniacal muriate of iron.

Old Names.	G	New Names.
Flowers, silver of regulus of antimony.		Sublimated oxide of antimony.
Flowers of arsenic.		Sublimated oxide of arsenic.
Flowers of benzoin.		Sublimated benzoic acid.
Flowers of bismuth.		Sublimated oxide of bismuth.
Flowers of tin.		Sublimated oxide of tin.
Flowers, metallic.		Sublimated metallic oxides.
Flowers of sulphur.		Sublimated sulphur.
Flowers of zinc.		Sublimated oxide of zinc.
Fluids, aëriform.		Gases.
Fluids, Elastic.		Gases.
Fluor, ammoniacal.		Ammoniacal fluate. Fluate of ammoniac.
Fluor, argillaceous.		Aluminous fluate. Fluate of alumine.
Fluor of potash.		Fluate of potash.
Fluor of soda.		Fluate of soda.
Fluor, magnesian.		Magnesian fluate. Fluate of magnesia.
Fluor, heavy.		Barytic fluate. Fluate of barytes.
Formiates, (salts.)		Formiates.

G

Galactes, (salts.)	Lactates.
Gas, acetous acid.	Acetous acid gas.
Gas, cretaceous acid.	Carbonic acid gas.
Gas, marine acid.	Muriatic acid gas.
Gas, aërated muriatic acid.	Oxigenated muriatic acid gas.
Gas, nitrous acid.	Nitrous acid gas.
Gas, sparry acid.	Fluoric acid gas.
Gas, sulphureous acid.	Sulphureous acid gas.
Gas, alkaline.	Ammoniacal acid gas.
Gas, hepatic.	Sulphurated hydrogenous gas.
Gas, inflammable.	Hydrogenous gas.
Gas, carbonaceous inflammable.	Carbonated hydrogenous gas.
Gas, inflammable, of marshes.	Hydrogenous gas of marshes, (a mixture of carbonated hydrogenous gas with azotic gas.)
Gas, mephitic.	Carbonic acid gas.
Gas, phlogisticated.	Gas azote.
Gas, nitrous.	Nitrous gas.

Old Names.	New Names.
	H
Gas, phoſphoric, of M. Gengembre.	Phoſphorated hydrogenous gas.
Gas, Pruſſian.	Pruſſic acid gas.
Gazeous waters.	Waters impregnated with carbonic acid.
Gilla vitrioli.	Sulphate of zinc.
Gluten of wheat.	Gluten, or glutinous principle.
Gold.	Gold.
Gold, fulminating.	Ammoniacal oxide of gold.
	H
Hepars.	Sulphures.
Heat, latent.	Caloric.
	I
Ink, ſympathetic, by cobalt.	Muriate of cobalt.
Iron, or *mars.*	Iron.
Iron, aërated.	Carbonate of iron.
Iron of water.	Phoſphate of iron.
Jupiter.	Tin.
	K
Kermes, mineral.	Red ſulphurated oxide of antimony.
	L
Latten.	Alloy of copper and zinc, *or* latten.
Lapis cauſticus.	Concrete potaſh *or* ſoda.
Limeſtone.	Carbonate of lime.
Lixivium of ſoapmakers.	Solution of ſoda.
Lignites, (ſalts.)	Pyro lignites.
Lilium of Paracelſus.	Alcohol of potaſh.
Liquor of flints.	Siliceous potaſh in liquor.
Liquor, Boyle's fuming.	Ammoniacal ſulphure. Sulphure of ammoniac.
Liquor, fuming, of Libavius.	Fuming muriate of tin.

Old Names.	L	New Names.
Litharge.		Semi-vitreous oxide of lead, *or* litharge.
Liquor saturated with the colouring part of Prussian blue.		Prussiate of potash.
Light.		Light.
Luna.		Silver.
Luna, corneous.		Muriate of silver.
Liver of antimony.		Sulphurated oxide of antimony.
Liver of arsenic.		Arsenical oxide of potash.
Liver, volatile alkaline of sulphur.		Ammoniacal sulphure. Sulphure of ammoniac.
Liver, antimoniated, of sulphur.		Antimoniated alkaline sulphure.
Liver, barotic, of sulphur.		Barytic sulphure. Sulphure of barytes.
Liver, calcareous, of sulphur.		Calcareous sulphure. Sulphure of lime.
Liver, magnesian, of sulphur.		Sulphure of magnesia. Magnesian sulphure.
Livers of sulphur.		Alkaline sulphures.
Livers of sulphur, earthy.		Earthy sulphures.
Lead, or *saturn.*		Lead.
Lead, corneous.		Muriate of lead.
Lead, spathose.		Carbonate of lead.

	M	
Magistery of bismuth.		Oxide of bismuth by nitric acid.
Magistery of sulphur.		Precipitated sulphur.
Magistery of lead.		Precipitated oxide of lead.
Magnesia, white.		Carbonate of magnesia.
Magnesia of Bergman, aërated.		Carbonate of magnesia.
Magnesia, caustic.		Magnesia.
Magnesia, cretaceous.		Carbonate of magnesia.
Magnesia, effervescent.		Carbonate of magnesia.
Magnesia, fluorated.		Fluate of magnesia.
Magnesia, black.		Black oxide of manganese.
Magnesia, sparry.		Fluate of magnesia.
Malusites, (salts.)		Malates of potash, soda, &c.
Massicot.		Yellow oxide of lead.
Matter of heat.		Caloric.
Matter of fire.		*This word has been used to signify* light, caloric, *and* phlogiston.

Old Names.	M	New Names.
Materia perlata of Kerkringius.		White oxide of antimony by precipitation.
Mephite, ammoniacal.		Ammoniacal carbonate. Carbonate of ammoniac.
Mephite, barotic.		Barytic carbonate. Carbonate of barytes.
Mephite, calcareous.		Calcareous carbonate. Carbonate of lime.
Milk of lime.		Lime diluted in water.
Mephite of magnesia.		Magnesian carbonate. Carbonate of magnesia.
Mephite of lead		Carbonate of lead.
Mephite of zinc.		Carbonate of zinc.
Mephite, martial.		Carbonate of iron.
Matter, colouring, of Prussian blue.		Prussic acid.
Mercury.		Mercury.
Mercury of metals.		Imaginary principle of Beccher.
Mercury, mild.		Mild mercurial muriate.
Mercury, white precipitated		Mercurial muriate by precipitation.
Minium.		Red oxide of lead, *or* minium.
Mofetes, atmospheric.		Azotic gas.
Molybdes, (salts)		Molybdates.
Molybde, ammoniacal.		Ammoniacal molybdate. Molybdate of ammoniac.
Molybde, barotic.		Barytic molybdate. Molybdate of barytes.
Molybde of potash.		Molybdate of potash.
Molybde of soda.		Molybdate of soda.
Molybdena.		Molybdena.
Mucilage.		Mucilage.
Muriates, (salts)		Muriates.
Muriate of antimony		Muriate of antimony.
Muriate of silver.		Muriate of silver.
Muriate of bismuth.		Muriate of bismuth.
Muriate of cobalt.		Muriate of cobalt.
Muriate of copper.		Muriate of copper.
Muriate of tin.		Muriate of tin.
Muriate of iron.		Muriate of iron.
Muriate of manganese.		Muriate of manganese.
Muriate of lead.		Muriate of lead.
Muriate of zinc.		Muriate of zinc.
Muriate or *regaline salt of platina.*		Nitro muriate of platina.

Old Names.	M	New Names.
Muriate or regaline ſalt of gold.		Muriate of gold.
Muriate, corroſive mercurial.		Corroſive mercurial muriate.
	N	
Natrum, or *natron.*		Carbonate of ſoda.
Nitre.		Nitrate of potaſh, *or* nitre.
Nitre, ammoniacal.		Ammoniacal nitrate.
Nitre, argillaceous.		Nitrate of alumine.
Nitre, calcareous.		Calcareous nitrate. Nitrate of lime.
Nitre, cubic.		Nitrate of ſoda.
Nitre of ſilver.		Nitrate of ſilver.
Nitre of arſenic.		Nitrate of arſenic.
Nitre of biſmuth.		Nitrate of biſmuth.
Nitre of cobalt.		Nitrate of cobalt.
Nitre of copper.		Nitrate of copper.
Nitre of tin.		Nitrate of tin.
Nitre of iron.		Nitrate of iron.
Nitre of magneſia.		Magneſian nitrate. Nitrate of magneſia.
Nitre of manganeſe.		Nitrate of manganeſe.
Nitre of nickel.		Nitrate of nickel.
Nitre of lead.		Nitrate of lead.
Nitre of terra ponderoſa.		Barytic nitrate. Nitrate of barytes.
Nitre of zinc.		Nitrate of zinc.
Nitre, fixed, by itſelf.		Carbonate of potaſh.
Nitre, lunar.		Nitrate of ſilver.
Nitre, mercurial.		Nitrate of mercury.
Nitre, priſmatic.		Nitrate of potaſh.
Nitre, quadrangular.		Nitrate of ſoda.
Nitre, rhomboidal.		Nitrate of ſoda.
Nitre, ſaturnine.		Nitrate of lead.
	O	
Ochre.		Yellow oxide of iron.
Oils, animal.		Volatile animal oil.

Old Names.	O	New Names.
Oil of lime.		Calcareous muriate.
Oil of tartar per deliquium.		Potash, mixed with carbonate of potash, in a deliquescent state.
Oil, philosopher's		Empyreumatic fixed oils.
Oil of vitriol.		Sulphuric acid.
Oil of wine, sweet.		Ethereal oil.
Oils, empyreumatic.		Empyreumatic oils.
Oils, ethereal.		Volatile oils.
Oils, fat.		Fixed oils.
Oils, essential.		Volatile oils.
Oils by expression.		Fixed oils.
Ore of antimony.		Native sulphure of antimony.
Ore of iron, from marshes.		Iron ore, containing phosphate of iron.
Orpiment.		Yellow sulphurated oxide of arsenic.
Oxygene.		Oxygene.
	P	
Phlogiston.		Imaginary principle of Stahl.
Philosophic wool.		Sublimated oxide of zinc.
Phosphate ammoniacal.		Ammoniacal phosphate. Phosphate of ammoniac.
Phosphate, barotic.		Barytic phosphate. Phosphate of barytes.
Phosphate, calcareous.		Calcareous phosphate. Phosphate of lime.
Phosphate of magnesia.		Magnesian phosphate. Phosphate of magnesia.
Phosphate of potash.		Phosphate of potash.
Phosphate of soda.		Phosphate of soda.
Phosphorus of Baudouin.		Dry calcareous nitrate.
Phosphorus of Kunckel.		Phosphorus.
Phosphorus of Homberg.		Dry calcareous muriate.
Ponderous stone.		Calcareous tunstate.
Platina.		Platina.
Plaster.		Calcareous sulphate, *or* calcined plaster.
Plumbago.		Carbure of iron.
Pompholyx.		Sublimated oxide of zinc.

Old Names.	P	New Names.
Potashes of commerce.		Impure carbonate of potash.
Putty of tin.		Grey oxide of tin.
Powder of Algaroth.		Oxide of antimony by muriatic acid.
Powder of Count Palma.		Carbonate of magnesia.
Powder of Sentinelly.		
Precipitate, white, by muriatic acid.		Mercurial muriate by precipitation.
Precipitate of gold by tin, or *purple of Cassius.*		Oxide of gold precipitated by tin.
Precipitate, yellow.		Yellow oxide of mercury by fulphuric acid.
Precipitate per se.		Red oxide of mercury by fire.
Precipitate, red.		Red oxide of mercury by nitric acid.
Principle, acidifying.		Oxygene.
Principle, astringent.		Gallic acid.
Principle, carbonaceous.		Carbone.
Principle, inflammable. (See *phlogiston.*)		
Principle, mercurial.		Imaginary principle of Beccher.
Principium sorbile of M. Ludbock.		Oxygene.
Prussite, calcareous.		Calcareous prussiate. Prussiate of lime.
Prussite of potash.		Prussiate of potash.
Prussite of soda.		Prussiate of soda.
Pyrites of copper.		Sulphure of copper.
Pyrites, martial.		Sulphure of iron.
Pyrophorus of Homberg.		Carbonated sulphure of alumine. Pyrophorus of Homberg.

	R	
Realgar, or *realgal.*		Red sulphurated oxide of arsenic.
Regaltes, (salts formed with aqua regia.)		Nitro-muriates.
Regia, aqua.		Nitro-muriatic acid.
Regulus.		*A word used to denote the* pure metallic state, *in opposition to* ores, *and* oxides.
Regulus of antimony.		Antimony.
Regulus of arsenic.		Arsenic.

Old Names.	New Names.
	R
Regulus of cobalt.	Cobalt.
Regulus of manganeſe.	Manganeſe.
Regulus of molybdena.	Molybdena.
Regulus of ſyderite.	Phoſphure of iron.
Reſins	Reſins.
Ruſt of copper.	Green oxide of copper.
Ruſt of iron.	Carbonate of iron.
Rubine of antimony.	Sulphurated oxide of antimony.
Red nitrated mercury.	Red oxide of mercury by nitric acid.
	S
Saffron of mars.	Oxide of iron.
Saffron, aperient, of mars.	Carbonate of iron.
Saffron, aſtringent, of mars.	Brown oxide of iron.
Saffron of metals.	Semi-vitreous ſulphurated oxide of antimony.
Saltpetre.	Nitrate of potaſh, *or* nitre.
Saturn.	Lead.
Soaps, acid.	Acid ſoaps.
Soaps, alkaline.	Alkaline ſoaps.
Soaps, earthy, or *oleo-terrene combinations of M. Berthollet.*	Earthy ſoaps.
Soaps, metallic, or *oleo-metallic combinations of M. Berthollet.*	Metallic ſoaps.
Soap of Starkey.	Saponula of potaſh.
Sebates, (ſalts.)	Sebates.
Salt, ammoniacal acetous.	Ammoniacal acetite. Acetite of ammoniac.
Salt, calcareous acetous.	Calcareous acetite. Acetite of lime.
Salt, acetous of clay.	Aluminous acetite. Acetite of alumine.
Salt, acetous of zinc.	Acetite of zinc.
Salt, magneſian acetous.	Magneſian acetite. Acetite of magneſia.
Salt, acetous martial.	Acetite of iron.
Salt, acetous mineral.	Acetite of ſoda.
Sal admirabile perlatum.	Superſaturatedphoſphateofſoda.
Sal Alembroth.	Ammoniaco-mercurial muriate.

Old Names.	S	New Names.
Sal ammoniac.		Ammoniacal muriate. Muriate of ammoniac.
Salt, cretaceous ammoniacal.		Ammoniacal carbonate.
Sal ammoniac, fixed.		Calcareous muriate. Muriate of lime.
Salt ammoniacal, nitrous.		Ammoniacal nitrate. Nitrate of ammoniac,
Salt ammoniacal, (a ſecret of Glauber's.)		Ammoniacal ſulphate. Sulphate of ammoniac.
Salt, bitter cathartic.		Magneſian ſulphate. Sulphate of magneſia,
Salt, ammoniacal ſedative.		Ammoniacal borate. Borate of ammoniac.
Salt, ammoniacal ſparry.		Ammoniacal fluate. Fluate of ammoniac.
Salt, ammoniacal vitriolic.		Ammoniacal ſulphate. Sulphate of ammoniac.
Salt, common.		Muriate of ſoda.
Salt, Engliſh.		Ammoniacal carbonate. Carbonate of ammoniac.
Salt of colcothar.		Sulphate of iron, *(its particular ſtate not well known.)*
Salt, kitchen.		Muriate of ſoda.
Salt, Glauber's.		Sulphate of ſoda.
Salt of Jupiter.		Muriate of tin.
Salt of milk.		Sugar of milk.
Salt of wiſdom.		Ammoniaco-mercurial muriate.
Salt of Epſom.		Magneſian ſulphate. Sulphate of magneſia.
Sal de Duobus.		Sulphate of potaſh.
Salt of Scheidſchutz.		Sulphate of magneſia.
Salt of Sedlitz.		Sulphate of magneſia.
Salt of Segner.		Sebate of potaſh.
Salt of Seignette.		Tartarite of ſoda.
Salt of amber, obtained by cryſtallization.		Cryſtalliſed ſuccinic acid.
Salt of ſorrel.		Acidulous oxalate of potaſh.
Salt, febrifuge, of Sylvius.		Muriate of potaſh.
Salt, fixed, of tartar.		Carbonate of potaſh not ſaturated.
Salt, fuſible, of urine.		Phoſphate of ſoda and ammoniac.
Sal gem.		Foſſil muriate of ſoda.

Old Names.	S	New Names.
Salt, marine.		Muriate of ſoda.
Salt, argillaceous marine.		Aluminous muriate. Muriate of alumine.
Salt, barotic marine.		Barytic muriate. Muriate of barytes.
Salt, calcareous marine.		Calcareous muriate. Muriate of lime.
Salt, marine, of iron.		Muriate of iron.
Salt, marine, of zinc.		Muriate of zinc.
Salt, magneſian marine.		Magneſian muriate. Muriate of magneſia.
Salt, native, of urine.		Phoſphate of ſoda and ammoniac.
Salt, neutral arſeniacal, of Macquer.		Acidulous arſeniate of potaſh.
Salt or *ſugar of ſaturn.*		Acetite of lead.
Salt, polychreſt, of Glaſer.		Sulphate of potaſh.
Salt, polychreſt, of Rochelle.		Tartarite of ſoda.
Salt, regaline, of gold.		Muriate of gold.
Salt, ſedative.		Boracic acid.
Salt, ſedative mercurial.		Borate of mercury.
Salt, ſublimated ſedative.		Sublimated boracic acid.
Salt, ſtanno-nitrous.		Nitrate of tin.
Salt, ſulphureous, of Stahl.		Sulphate of potaſh.
Salt, vegetable.		Tartarite of potaſh.
Salt, volatile, of England.		Ammoniacal carbonate.
Salt, volatile, of amber.		Sublimated ſuccinic acid.
Selenite.		Sulphate of lime.
Smalt.		Oxide of cobalt vitrified with ſilex, or *ſmalt.*
Soda, cauſtic.		Soda.
Soda, cretaceous.		Carbonate of ſoda.
Soda, ſpathoſe.		Fluate of ſoda.
Sulphur.		Sulphur.
Sulphur, gilded, of antimony.		Sulphurated, orange, oxide of antimony.
Spar, ammoniacal.		Ammoniacal fluate.
Spar, calcareous.		Carbonate of lime.
Spar, fluor.		Calcareous fluate.
Spar, ponderous.		Sulphate of barytes.
Spiritus ſylveſtris.		Carbonic acid.
Snow of antimony.		White ſublimated oxide of antimony.

Old Names.	New Names.
	S
Spirit, acid, of wood.	Pyro-ligneous acid.
Spirit, volatile alkaline.	Gas ammoniac, *or* ammoniacal gas.
Spirit, ardent, or *spirit of wine.*	Alcohol.
Spirit of Mendererus.	Ammoniacal acetite.
Spirit of nitre.	Nitric acid diluted in water.
Spirit, fuming, of nitre.	Nitrous acid.
Spirit, dulcified, of nitre.	Nitric alcohol.
Spirit of salt.	Muriatic acid.
Spirit of sal ammoniac.	Ammoniac.
Spirit of wine.	Alcohol.
Spirit of vitriol.	Sulphuric acid diluted in water.
Spirit of Venus.	Acetic acid.
Spiritus rector.	Aroma.
Spirits, acid.	Acids diluted in water.
Spirit, volatile, of sal ammoniac.	Ammoniac diluted in water.
Sublimate, corrosive.	Corrosive muriate of mercury.
Sublimate, mild.	Mild muriate of mercury.
Lemon, or *citron juice.*	Citric acid.
Semi-metals.	Semi-metals.
Succinum.	Amber.
Stone, infernal.	Melted nitrate of silver.
Sugar.	Sugar.
Sugar candy.	Crystallised sugar.
Sugar of saturn.	Acetite of lead.
Sugar or *salt of milk.*	Sugar of milk.
Syderite.	Phosphate of iron.
Stearch.	Stearch.
Syderotete, of M. de Morveau.	Phosphure of iron.
Steel.	Steel.
Stone in the bladder.	Lithic acid.
	T
Tartar.	Acidulous tartarite of potash.
Tartar, ammoniacal.	Ammoniacal tartarite.
Tartar, antimoniated.	Antimoniated tartarite of potash.
Tartar, calcareous.	Tartarite of lime.
Tartar chalybeate.	Ferruginous tartarite of potash.
Tartar, cretaceous.	Carbonate of potash.
Tartar, crude.	Tartar.

Old Names.	T	New Names.
Tartar, cupreous.		Tartarite of copper.
Tartar of magnesia.		Tartarite of magnesia.
Tartar of potash.		Tartarite of potash.
Tartar of soda.		Tartarite of soda.
Tartar, emetic.		Antimoniated tartarite of potash.
Tartar, soluble martial.		Ferruginous tartarite of potash.
Tartar, mephitic.		Carbonate of potash.
Tartar, mercurial.		Mercurial tartarite.
Tartar, saturnine.		Tartarite of lead.
Tartar, spathose.		Fluate of potash.
Tartar, soluble.		Tartarite of potash.
Tartar, stibiated.		Antimoniated tartarite of potash.
Tartar, tartarised.		Tartarite of potash.
Tartar, tartarised, containing antimony.		Tartarite of potash, with an addition of antimony.
Tartar, vitriolated.		Sulphate of potash.
Tartar, acrid tincture of.		Alcohol of potash.
Tinctures, spiritous.		Resinous alcohol.
Terra animalis.		Calcareous phosphate. Phosphate of lime.
Terrene base of alum.		Alumine.
Terrene base of ponderous spar.		Barytes.
Terra calcaria.		Lime, *or* calcareous earth.
Terra aluminæ.		Alumin.
Terra foliata, crystallisable.		Acetite of soda.
Terra foliata tartaria.		Acetite of potash.
Terra foliata mercurialis.		Acetite of mercury.
Terra mineralis.		Acetite of soda.
Terra magnesiana.		Carbonate of magnesia.
Terra muriatica of M. Kirwan.		Magnesia.
Terra ponderosa.		Barytes.
Terra ponderosa aerated.		Carbonate of barytes.
Terra silicea.		Silex, *or* siliceous earth.
Tungstic salts.		Tunstates.
Tungstic ammoniacal.		Ammoniacal tunstate.
Tungstic of potash.		Tunstate of potash.
Turbith, mineral.		Yellow mercurial oxide by sulphuric acid.
Turbith, nitrous.		Yellow mercurial oxide by nitrous acid.
Tin.		Tin.
Tin, corneous.		Muriate of tin.

Old Names.	V	New Names.
Verdegris.		Green oxide of copper.
Verdigris of commerce.		Acetite of copper, with an excefs of oxide of copper.
Venus.		Copper.
Verdet (Fr.), or *verdigris.*		Acetite of copper.
Verdigris, diftilled.		Cryftallifed acetite of copper.
Vitrum antimonii.		Vitrous fulphurated oxide of antimony.
Vivum argentum.		Mercury.
Vinegar, diftilled.		Acetous acid.
Vinegar of faturn.		Acetite of lead.
Vinegar, radical.		Acetic acid.
Vitriol, ammoniacal.		Ammoniacal fulphate.
Vitriol, white.		Sulphate of zinc.
Vitriol, blue.		Sulphate of copper.
Vitriol, calcareous.		Sulphate of lime.
Vitriol of antimony.		Sulphate of antimony.
Vitriol of filver.		Sulphate of filver.
Vitriol of clay.		Sulphate of alumine.
Vitriol of bifmuth.		Sulphate of bifmuth.
Vitriol of lime.		Calcareous fulphate.
Vitriol of Cyprus.		Sulphate of copper.
Vitriol of cobalt.		Sulphate of cobalt.
Vitriol of copper.		Sulphate of copper.
Vitriol of luna.		Sulphate of filver.
Vitriol of manganefe.		Sulphate of manganefe.
Vitriol of mercury.		Sulphate of mercury.
Vitriol of nickel.		Sulphate of nickel.
Vitriol of platina.		Sulphate of platina.
Vitriol of lead.		Sulphate of lead.
Vitriol of potafh.		Sulphate of potafh.
Vitriol of foda.		Sulphate of foda.
Vitriol of tin.		Sulphate of tin.
Vitriol of zinc.		Sulphate of zinc.
Vitriol, magnefian.		Sulphate of magnefia.
Vitriol, martial.		Sulphate of iron.
Vitriol, green.		Sulphate of iron.
	W	
Water.		Water.
Water, aerated.		Carbonic acid.

Old Names.	W	*New Names.*
Water, lime.		Lime-water.
Water, Pruſſian-lime.		Pruſſiate of lime.
Water, diſtilled.		Diſtilled water.
Water, ſtrong, or *aqua fortis.*		Nitric acid of commerce.
Waters, gazeous.		Waters impregnate with carbonic acid.
Waters, mothers.		Saline deliqueſcent reſidue.
Water, mercurial.		Nitrate of mercury in a ſtate of ſolution.
Water, royal, or *aqua regia.*		Nitro-muriatic acid.
Waters, acidulous.		Acidulous waters, or waters impregnated with carbonic acid.
Waters hepatic.		Sulphureous or ſulphurated waters.
Wolfram of Meſſrs d'Elhuyar.		Tungſten.
	Z	
Zinc.		Zinc.
Zaffre.		Grey oxide of cobalt, with ſiliceous earth, or *zaffre.*

DIC-

DICTIONARY

FOR THE

NEW CHEMICAL NOMENCLATURE.

Old Names.	New Names.
	A
	These are salts formed by the combination of the acetic acid (or radical vinegar) with different bases. The following names, with which there are none synonymous in the ancient Nomenclature, belong to this genus.
	ACETATES. *Acetas, tis. s. m.*
	Acetate, aluminous. ——— of alumine. *Acetas aluminosus.*
	Acetate, ammoniacal. ——— of ammoniac *. *Acetas ammoniacalis.*

* For the future, we shall not repeat these two modes of expressing the base of a neutral salt together, but use them indifferently. These instances already given, are enough to show, that either the substantive or the adjective may be used, at pleasure.

This observation extends also to the Latin Nomenclature.

New Names.	A	Old Names.
Acetate of antimony. *Acetas stibii.*		
Acetate of silver. *Acetas argenti.*		
Acetate of arsenic. *Acetas arsenici.*		
Acetate of barytes. *Acetas barytis,* or *barytæ.*		
Acetate of bismuth. *Acetas bismuthi.*		
Acetate of lime. *Acetas calcis.*		
Acetate of cobalt. *Acetas cobalti.*		
Acetate of copper. *Acetas cupri.*		
Acetate of tin. *Acetas stanni.*		
Acetate of iron. *Acetas ferri.*		
Acetate of magnesia. *Acetas magnesiæ.*		
Acetate of manganese. *Acetas magnesii.*		
Acetate of mercury. *Acetas hydrargyri.*		
Acetate of molybdena. *Acetas molybdeni.*		
Acetate of nickel. *Acetus niccoli.*		
Acetate of gold. *Acetas auri.*		
Acetate of platina. *Acetas platini.*		
Acetate of lead. *Acetas plumbi.*		

New Names.	A	Old Names.
Acetate of potash. *Acetas potassæ.*		
Acetate of soda. *Acetas sodæ.*		
Acetate of tungsten. *Acetas tunsteni.*		
Acetate of zinc. *Acetas zinci.*		
Acetite. *Acetis, itis. s. m.*		Salts formed by the union of the acetous acid, or distilled vinegar, with different bases.
Acetite, aluminous. *Acetis aluminosus.*		*Acetited clay.* *Acetous salt of clay.*
Acetite, ammoniacal. *Acetis ammoniacalis.*		*Ammoniacal aectite.* *Ammoniacal acetous salt.* *Spirit of Mendererus.*
Acetite of antimony. *Acetis stibii.*		
Acetite of silver. *Acetis argenti.*		
Acetite of arsenic. *Acetis arsenicalis.*		*Fuming arsenico-acetous liquor of M. Cadet.*
Acetite of barytes. *Acetis baryticus.*		
Acetite of bismuth. *Acetis bismuthi.*		
Acetite of lime. *Acetis calcareus.*		*Acetited lime.* *Calcareous acetous salt.*
Acetite of cobalt. *Acetis cobalti.*		
Acetite of copper. *Acetis cupri.*		*Acetited copper.* *Verdigris.* *Distilled verdigris of commerce.* *Crystals of Venus.*
Acetite of tin. *Acetis stanni.*		

New Names.	A	Old Names.
Acetite of iron. *Acetis ferri.*		*Acetited iron.* *Martial acetous salt.*
Acetite of magnesia. *Acetis magnesiæ.*		*Magnesian acetous salt.* *Acetited magnesia.*
Acetite of mercury. *Acetis hydrargyri.*		*Acetited mercury.* *Terra foliata mercurialis.*
Acetite of molybdena. *Acetis molybdeni.*		
Acetite of nickel. *Acetis niccoli.*		
Acetite of gold. *Acetis auri.*		
Acetite of platina. *Acetis platini.*		
Acetite of lead. *Acetis plumbi.*		*Acetited lead.* *Vinegar of saturn.* *Salt* or *sugar of saturn.*
Acetite of potash. *Acetis potassæ,* vel *potasseus.*		*Acetited potash.* *Terra foliata tartari.*
Acetite of soda. *Acetis sodæ,* vel *sodaceus.*		*Acetited soda.* *Mineral acetous salt.* *Terra foliata mineralis.* *Crystallisable terra foliata.*
Acetite of tungsten. *Acetis tunsteni.*		
Acetite of zinc. *Acetis zinci.*		*Acetited zinc.* *Acetous salt of zinc.*
Acid, acetous. *Acidum acetosum.*		*Acetous acid.* *Distilled vinegar.*
Acid, acetic. *Acidum aceticum.*		*Radical vinegar.* *Spirit of Venus.*
Acid, arsenic. *Acidum arsenicum.*		*Arsenical acid.*
Acid, benzoic. *Acidum benzoicum.*		*Benzonic acid.* *Acid of benzoin.* *Salt of benzoin.*
Acid, sublimated benzoic. *Acidum benzoicum sublimatum.*		*Flowers of benzoin.* *Volatile salt of benzoin.*

New Names.	A	Old Names.
Acid, bombic. *Acidum bombicum.*		*Acid of the silk worm.* *Bombycine acid.*
Acid, boracic. *Acidum boracicum.*		*Volatile narcotic salt of vitriol.* *Sedative salt.* *Acid of borax.* *Boracine acid.*
Acid, carbonic. *Acidum carbonicum.*		*Gas sylvestre.* *Spiritus sylvestris.* *Fixed air.* *Aërial acid.* *Atmospheric acid.* *Mephitic acid.* *Cretaceous acid.* *Carbonaceous acid.*
Acid, citric. *Acidum citricum.*		*Lemon juice.* *Citronian acid.*
Acid, fluoric. *Acidum fluoricum.*		*Fluoric acid.* *Spathose acid.*
Acid, formic. *Acidum formicum.*		*Acid of ants.* *Formicine acid.*
Acid, gallic. *Acidum gallæ,* seu *gallaceum.*		*Astringent principle.* *Gallic acid.*
Acid, lactic. *Acidum lacticum.*		*Sour whey.* *Galactic acid.*
Acid, lithic. *Acidum lithicum.*		*Acid of the stone in the bladder.* *Bezoardic acid.* *Lithiasic acid.*
Acid, malic. *Acidum malicum.*		*Acid of apples.* *Malusian acid.*
Acid, molybdic. *Acidum molybdicum.*		*Acid of molybdena.* *Molybdic acid.* *Acid of Wolfram.*
Acid, muriatic. *Acidum muriaticum.*		*Acid of marine salt.* *Fuming spirit of salt.* *Marine acid.*
Acid, oxigenated muriatic. *Acidum muriaticum oxigenatum.*		*Dephlogisticated marine acid.* *Aërated marine acid.*

New Names.	A	Old Names.
Acid, nitrous. *Acidum nitrosum.*		*Ruddy nitrous acid. Phlogisticated nitrous acid, Fuming nitrous acid. Fuming spirit of nitre.*
Acid, nitric. *Acidum nitricum.*		*White nitrous acid. Nitric acid without gas. Dephlogisticated nitrous acid.*
Acid, nitro-muriatic. *Acidum nitro-muriaticum.*		*Aqua regia. Regaline acid.*
Acid, oxalic. *Acidum oxallicum.*		*Acid of sorrel. Oxalline acid. Saccharine acid. Acid of sugar.*
Acid, phosphorus. *Acidum phosphorosum.*		*Volatile phosphoric acid.*
Acid, phosphoric. *Acidum phosphoricum.*		*Phosphoric acid. Acid of urine.*
Acid, prussic. *Acidum prussicum.*		*Colouring matter of Prussian blue.*
Acid, pyro-ligneous. *Acidum pyro-lignosum.*		*Empyreumatic acid spirit of wood.*
Acid, pyro-mucous. *Acidum pyro mucosum*		*Spirit of honey, sugar,* &c. *Syrupous acid.*
Acid, pyro-tartarous. *Acidum pyro-tartarosum.*		*Spirit of tartar.*
Acid, saccho-lactic. *Acidum saccho-lacticum.*		*Acid of sugar of milk. Saccho-lactic acid.*
Acid, sebacic. *Acidum sebacicum.*		*Sebaceous acid. Acid of tallow.*
Acid, succinic. *Acidum succinicum.*		*Acid of amber. Volatile salt of amber.*
Acid, sulphureous. *Acidum sulphurosum.*		*Sulphureous acid. Volatile sulphureous acid. Phlogisticated vitriolic acid. Spirit of sulphur.*
Acid, sulphuric. *Acidum sulphuricum.*		*Acid of sulphur. Vitriolic acid. Oil of vitriol. Spirit of vitriol.*

New Names.	A	Old Names.
Acid, tartareous. *Acidum tartarosum.*		*Tartareous acid.* *Acid of tartar.*
Acid tunstic. *Acidum tunsticum.*		*Tungstic acid.* *Acid of tungsten.* *Acid of Wolfram.*
Affinity. *Affinitas.*		*Affinity.*
Aggregation. *Aggregatio.*		*Aggregation.*
Aggregates. *Aggregata.*		*Aggregates.*
Atmospheric air. *Aer atmosphericus.*		*Atmospheric air.*
Alkalis. *Alkalia.*		*Alkalis in general.*
Alcohol. *Alcohol*, indecl.		*Spirit of wine.* *Ardent spirit.*
Alcohol of potash. *Alcohol potassæ.*		*Lilium of Paracelsus.* *Acrid tincture of tartar.*
Alcohol, nitric. *Alcohol nitricum.*		*Dulcified spirit of nitre.*
Alcohols, resinous. *Alcohol resinosa.*		*Spiritous tinctures.*
Alloy. *Connubium metallicum.*		*Alloy of metals.*
Alumine. *Alumina.*		*Earth of alum.* *Base of alum.* *Pure clay.*
Amalgam.		*Amalgam.*
Ammoniac. *Ammoniaca.*		*Caustic volatile alkali.* *Fluor volatile alkali.* *Volatile spirit of sal ammoniac.*
Antimony. *Antimonium, stibium.*		*Regulus of antimony.*
Aroma. *Aroma.*		*Spiritus rector.* *Odorate principle.*
Arseniates. *Arsenias, tis. f. m.*		*Arsenical salts.*

New Names.	A	Old Names.
Acidulous arseniate of potash. *Arsenias acidulus potassæ.*		*Macquer's arsenical neutral salt.*
Arseniate of alumine. *Arsenias aluminæ.*		
Arseniate of ammoniac. *Arsenias ammoniacæ,* seu *ammoniacalis.*		*Arsenical ammoniac.*
Arseniate of silver. *Arsenias argenti.*		
Arseniate of barytes. *Arsenias barytæ.*		
Arseniate of bismuth. *Arsenias bismuthi.*		
Arseniate of lime. *Arsenias calcis.*		
Arseniate of cobalt. *Arsenias cobalti.*		
Arseniate of copper. *Arsenias cupri.*		
Arseniate of tin. *Arsenias stanni.*		
Arseniate of iron. *Arsenias ferri.*		
Arseniate of magnesia. *Arsenias magnesiæ.*		
Arseniate of manganese. *Arsenias magnesii.*		
Arseniate of mercury. *Arsenias hydrargyri.*		
Arseniate of molybdena. *Arsenias molybdeni.*		
Arseniate of nickel. *Arsenias niccoli.*		
Arseniate of gold. *Arsenias auri.*		
Arseniate of platina. *Arsenias platini.*		

New Names.	Old Names.
A	
Arseniate of lead. *Arsenias plumbi.*	
Arseniate of potash. *Arsenias potassæ.*	
Arseniate of soda. *Arsenias sodæ.*	
Arseniate of tungsten. *Arsenias tunsteni.*	
Arseniate of zinc. *Arsenias zinci.*	
Azote.	*Base of atmospheric mephitise.*
B	
Barytes, *or* baryta. *Baryta.*	*Terra ponderosa.* *Earth of ponderous spar.* *Barotes.*
Balsams. *Balsama.*	*Balsams of Bucquet.* *
Benzoin. *Benzoe.*	*Benzoin.*
Benzoate. *Benzoas, tis. s. m.*	*Benzone.* A salt formed by the union of the benzoic acid with different bases. Salts of this kind have no names in the old Nomenclature.
Benzoate of alumine. *Benzoas aluminosus.*	
Benzoate of ammoniac. *Benzoas ammoniacalis.*	
Benzoate of antimony. *Benzoas stibii.*	

* Resins combined with a concrete acid salt,

New Names.	B	Old Names.
Benzoate of silver. *Benzoas argenti.*		
Benzoate of arsenic. *Benzoas arsenicalis.*		
Benzoate of barytes. *Benzoas baryticus.*		
Benzoate of bismuth. *Benzoas bismuthi.*		
Benzoate of lime. *Benzoas calcareus.*		
Benzoate of cobalt. *Benzoas cobalti.*		
Benzoate of copper. *Benzoas cupri.*		
Benzoate of tin. *Benzoas stanni.*		
Benzoate of iron. *Benzoas ferri.*		
Benzoate of magnesia. *Benzoas magnesiæ.*		
Benzoate of manganese. *Benzoas magnesii.*		
Benzoate of mercury. *Benzoas hydrargyri.*		
Benzoate of molybdena. *Benzoas molybdeni.*		
Benzoate of nickel. *Benzoas niccoli.*		
Benzoate of gold. *Benzoas auri.*		
Benzoate of platina. *Benzoas platini.*		
Benzoate of lead. *Benzoas plumbi.*		
Benzoate of potash. *Benzoas potassæ.*		

New Names.	B	Old Names.
Benzoate of ſoda. *Benzoas ſodæ.*		
Benzoate of tungſten. *Benzoas tunſteni.*		
Benzoate of zinc. *Benzoas zinci.*		
Biſmuth. *Biſmuthum.*		*Biſmuth.*
Bitumens. *Bitumina.*		*Bitumens.*
Bombiate. *Bombias, tis. ſ. m.*		Salts formed by the union of the bombic acid with different baſes. This genus of ſalts had no name in the old Nomenclature.
Bombiate of alumine. *Bombias aluminoſus.*		
Bombiate of ammoniac. *Bombias ammoniacalis.*		
Bombiate of antimony. *Bombias ſtibii.*		
Bombiate of ſilver. *Bombias argenti.*		
Bombiate of arſenic. *Bombias arſenicalis.*		
Bombiate of barytes. *Bombias baryticus.*		
Bombiate of biſmuth. *Bombias biſmuthi.*		
Bombiate of lime. *Bombias calcareus.*		
Bombiate of cobalt. *Bombias cobalti.*		
Bombiate of copper. *Bombias cupri.*		
Bombiate of tin. *Bombias ſtanni.*		

New Names.	B	Old Names.
Bombiate of iron. *Bombias ferri.*		
Bombiate of magnesia. *Bombias magnesiæ.*		
Bombiate of manganese. *Bombias magnesii.*		
Bombiate of mercury. *Bombias hydrargyri.*		
Bombiate of molybdena. *Bombias molybdeni.*		
Bombiate of nickel. *Bombias niccoli.*		
Bombiate of gold. *Bombias auri.*		
Bombiate of platina. *Bombias platini.*		
Bombiate of lead. *Bombias plumbi.*		
Bombiate of potash. *Bombias potassæ.*		
Bombiate of soda. *Bombias sodæ.*		
Bombiate of tungsten. *Bombias tunsteni.*		
Bombiate of zinc. *Bombias zinci.*		
Borate. *Boras, tis. f. m.*		*Borax.*
Borate, aluminous. *Boras aluminosus.*		*Argillaceous borax.*
Borate, ammoniacal. *Boras ammoniacalis.*		*Ammoniacal borax.* *Sedative sal ammoniac.*
Borate of antimony. *Boras stibii.*		*Borax of antimony.*
Borate of silver. *Boras argenti.*		

New Names.	B	Old Names.
Borate of arſenic. *Boras arſenici.*		
Borate of barytes, *or* baryta. *Boras barytæ.*		*Ponderous* or *barotic borax.*
Borate of biſmuth. *Boras biſmuthi.*		
Borate of lime. *Boras calcis.*		
Borate of cobalt. *Boras cobalti.*		*Borax of cobalt.*
Borate of copper. *Boras cupri.*		*Borax of copper.*
Borate of tin. *Boras ſtanni.*		
Borate of iron. *Boras ferri.*		*Borax of iron.*
Borate of magneſia. *Boras magneſiæ.*		*Magneſian borax.*
Borate of manganeſe. *Boras magneſii.*		
Borate of mercury. *Boras mercurii.*		*Mercurial borax.* *Mercurial ſedative ſalt.*
Borate of molybdena. *Boras molybdeni.*		
Borate of nickel. *Boras niccoli.*		
Borate of gold. *Boras auri.*		
Borate of platina. *Boras platini.*		
Borate of lead. *Boras plumbi.*		
Borate of potaſh. *Boras potaſſæ.*		*Vegetable borax.*
Borate of ſoda. *Boras ſodæ.*		*Common borax ſaturated with boracic acid.*

New Names.	Old Names.
	B
Borate of tungſten. *Boras tunſteni.*	
Borate of zinc. *Boras zinci.*	*Borax of zinc.*
Borate of ſoda, *or* borate ſuper-ſaturated with ſoda.	*Crude borax.* *Tinckal.* *Chryſocolla.* *Borax of commerce.*
	C
Caloric. *Caloricum.*	*Latent heat.* *Fixed heat.* *Principle of heat.*
Camphor. *Camphora.*	*Camphor.*
Camphorate. *Camphoras, tis. ſ. m.*	A ſalt formed by the combination of camphoric acid with different baſes. Theſe ſalts were not known formerly; and accordingly they have no names in the old Nomenclature.
Camphorate of alumine. *Camphoras aluminoſus.*	
Camphorate of ammoniac. *Camphoras ammoniacalis.*	
Camphorate of antimony. *Camphoras ſtibii.*	
Camphorate of ſilver. *Camphoras argenti.*	
Camphorate of arſenic. *Camphoras arſenicalis.*	
Camphorate of barytes. *Camphoras baryticus.*	

New Names.	C	Old Names.
Camphorate of bismuth. *Camphoras bismuthi.*		
Camphorate of lime. *Camphoras calcareus.*		
Camphorate of cobalt. *Camphoras cobalti.*		
Camphorate of copper. *Camphoras cupri.*		
Camphorate of tin. *Camphoras stanni.*		
Camphorate of iron. *Camphoras ferri.*		
Camphorate of magnesia. *Camphoras magnesiæ.*		
Camphorate of manganese. *Camphoras magnesii.*		
Camphorate of mercury. *Camphoras mercurii.*		
Camphorate of molybdena. *Camphoras molybdeni.*		
Camphorate of nickel. *Camphoras niccoli.*		
Camphorate of gold. *Camphoras auri.*		
Camphorate of platina. *Camphoras platini.*		
Camphorate of lead. *Camphoras plumbi.*		
Camphorate of potash. *Camphoras potassæ.*		
Camphorate of soda. *Camphoras sodæ.*		
Camphorate of tungsten. *Camphoras tunsteni.*		
Camphorate of zinc. *Camphoras zinci.*		

New Names	C	Old Names.
Carbone. *Carbonicum.*		*Pure coal.*
Carbonate. *Carbonas, tis, f. m.*		A ſalt formed by the union of carbonic acid with different baſes.
Carbonate of alumine. *Carbonas aluminoſus.*		*Cretaceous clay.*
Carbonate, ammoniacal. *Carbonas ammoniacæ.*		*Ammoniacal chalk.* *Cretaceous ammoniacal ſalt.* *Concrete volatile alkali.* *Ammoniacal mephite.* *Engliſh ſal volatile.*
Carbonate of antimony. *Carbonas antimonii.*		
Carbonate of ſilver. *Carbonas argenti.*		
Carbonate of arſenic. *Carbonas arſenici.*		
Carbonate of barytes. *Carbonas baryticus.*		*Barotic* or *ponderous chalk.* *Aërated ponderous earth.* *Effervefcent barotes.* *Barotic mephite.*
Carbonate of biſmuth. *Carbonas biſmuthi.*		
Calcareous carbonate. *Carbonas calcareus.*		*Chalk.* *Limeſtone.* *Calcareous mephite.* *Aërated calcareous earth.* *Effervefcent calcareous earth.* *Calcareous ſpar.* *Cream of lime.*
Carbonate of cobalt. *Carbonas cobalti.*		
Carbonate of copper. *Carbonas cupri.*		
Carbonate of tin. *Carbonas ſtanni.*		

New Names.	Old Names.
	S
Carbonate of iron. *Carbonas ferri.*	*Aperient saffron of mars.* *Rust of iron.* *Aerated iron.* *Martial chalk.* *Martial mephite.*
Carbonate of magnesia. *Carbonas magnesiæ.*	*Magnesian earth.* *White Magnesia.* *Aerated magnesia of Bergman.* *Cretaceous magnesia.* *Magnesian chalk.* *Effervescent magnesia.* *Mephite of magnesia.* *Kirwan's muriatic earth.* *Powder of Count Palma,* and *of Sentinelli.*
Carbonate of manganese. *Carbonas magnesii.*	
Carbonate of mercury. *Carbonas hydrargyri.*	
Carbonate of molybdena. *Carbonas molybdeni.*	
Carbonate of nickel. *Carbonas niccoli.*	
Carbonate of gold. *Carbonas auri.*	
Carbonate of platina. *Carbonas platini.*	
Carbonate of lead. *Carbonas plumbi.*	*Chalk of lead.* *Spathose lead.* *Mephite of lead.*
Carbonate of potash. *Corbonas potassæ.*	*Fixed salt of tartar.* *Vegetable fixed alkali.* *Aerated vegetable fixed alkali.* *Cretaceous tartar.* *Mephitic tartar.* *Mephite of potash.* *Nitre fixed by itself.* *Alkahest of Van Helmont.*

New Names.	T	Old Names.
Carbonate of soda. *Carbonas sodæ.*		*Natrum or Natron.* *Base of marine salt.* *Marine or mineral alkali.* *Crystals of soda.* *Cretaceous soda.* *Aerated soda.* *Effervescent soda.* *Mephite of soda.* *Aerated mineral fixed alkali.* *Effervescent mineral fixed alkali.* *Chalk of soda.*
Carbonate of tungsten. *Carbonas tunsteni.*		
Carbonate of zinc. *Carbonas zinci.*		*Chalk of zinc.* *Aerated zinc.* *Mephite of zinc.*
Carbure of iron.		*Plumbago.*
Calcareous earth or lime, diluted in water.		*Milk of lime.*
Calcareous earth or lime.		*Calcareous earth.* *Quicklime.*
Citrate. *Citras, tis, f. m.*		A salt formed by the combination of the acid of citrons with different bases. This salt had no name in the old nomenclature.
Citrate of alumine. *Citras aluminosus.*		
Citrate of ammoniac. *Citras ammoniacalis.*		
Citrate of antimony. *Citras stibii.*		
Citrate of silver. *Citras argenti.*		
Citrate of arsenic. *Citras arsenicalis.*		
Citrate of barytes. *Citras baryticus.*		

New Names.	A	Old Names.
Citrate of bismuth. *Citras bismuthi.*		
Citrate of lime. *Citras calcareus.*		
Citrate of cobalt. *Citras cobalti.*		
Citrate of copper. *Citras cupri.*		
Citrate of tin. *Citras stanni.*		
Citrate of iron. *Citras ferri.*		
Citrate of magnesia. *Citras magnesiæ.*		
Citrate of manganese. *Citras magnesii.*		
Citrate of mercury. *Citras mercurii.*		
Citrate of molybdena. *Citras molybdeni.*		
Citrate of nickel. *Citras niccoli.*		
Citrate of gold. *Citras auri.*		
Citrate of platina. *Citras platini.*		
Citrate of lead. *Citras plumbi.*		
Citrate of potash. *Citras potassæ.*		
Citrate of soda. *Citras sodæ.*		
Citrate of tungsten. *Citras tunsteni.*		
Citrate of zinc. *Citras zinci.*		

New Names.	Old Names.
C	
Clay, a mixture of aluminous and ſiliceous earth, *argilla.*	*Clay.* *Potter's earth.* *Argillaceous earth.*
Cobalt.	*Regulus of cobalt.* *Cobalt,* or *cobolt.*
Copper. *Cuprum.*	*Copper.* *Venus.*
D	
Diamond.	*Diamond.*
E	
Ether, acetic. *Ether aceticum.*	*Acetous ether.*
Ether, muriatic. *Ether muriaticum.*	*Marine ether.*
Ether, nitric. *Ether nitricum.*	*Nitrous ether.*
Ether, ſulphuric. *Ether ſulphuricum.*	*Vitriolic ether.*
Extractive principle. *Extractum.*	*Extract.*
F	
Fecula. *Fecula.*	*Fecula of plants.*
Fluate. *Fluas, tis. ſ. m.*	A ſalt formed by the combination of the fluoric acid with different baſes.
Fluate of alumine. *Fluas aluminæ.*	*Argillaceous fluor.* *Spathoſe clay.*

New Names.	F	Old Names.
Fluate, ammoniacal. *Fluas ammoniacalis.*		*Ammoniacal ſparry ſalt. Sparry ammoniac. Ammoniacal ſpar. Ammoniacal fluor.*
Fluate of antimony. *Fluas ſtibii.*		
Fluate of ſilver. *Fluas argenti.*		
Fluate of arſenic. *Fluas arſenicalis.*		
Fluate of barytes. *Fluas barytæ.*		*Ponderous fluor. Barotic fluor.*
Fluate of biſmuth. *Fluas biſmuthi.*		
Fluate of lime. *Fluas calcareus.*		*Fluor ſpar. Vitreous ſpar. Cubic ſpar. Phoſphoric ſpar. Sparry fluor.*
Fluate of cobalt. *Fluas cobalti.*		
Fluate of copper. *Fluas cupri.*		
Fluate of tin. *Fluas ſtanni.*		
Fluate of iron. *Fluas ferri.*		
Fluate of magneſia. *Fluas magneſiæ.*		*Fluorated magneſia. Sparry magneſia. Magneſian fluor.*
Fluate of manganeſe. *Fluas magneſii.*		
Fluate of mercury. *Fluas mercurii.*		
Fluate of molybdena. *Fluas molybdeni.*		
Fluate of nickel. *Fluas niccoli.*		

New Names.	F	Old Names.
Fluate of gold. *Fluas auri.*		
Fluate of platina. *Fluas platini.*		
Fluate of lead. *Fluas plumbi.*		
Fluate of potash. *Fluas potassæ.*		*Tartareous fluor.* *Sparry tartar.*
Fluate of soda. *Fluas sodæ.*		*Fluor of soda.* *Sparry soda.*
Fluate of tungsten. *Fluas tunsteni.*		
Fluate of zinc. *Fluas zinci.*		
Formiate. *Formias, tis. f. m.*		Salt formed by the combination of the formic acid with different bases. This genus of salt has no name in the old nomenclature.
Formiate of alumine. *Formias aluminosus.*		
Formiate of ammoniac. *Formias ammoniacalis.*		
Formiate of antimony. *Formias stibii.*		
Formiate of silver. *Formias argenti.*		
Formiate of arsenic. *Formias arsenicalis.*		
Formiate of barytes. *Formias baryticus.*		
Formiate of bismuth. *Formias bismuthi.*		
Formiate of lime. *Formias calcareus.*		

New Names.	F	Old Names.
Formiate of cobalt. *Formias cobalti.*		
Formiate of copper. *Formias cupri.*		
Formiate of tin. *Formias ſtanni.*		
Formiate of iron. *Formias ferri.*		
Formiate of magneſia. *Formias magneſiæ.*		
Formiate of manganeſe. *Formias magneſii.*		
Formiate of mercury. *Formias mercurii.*		
Formiate of molybdena. *Formias molybdeni.*		
Formiate of nickel. *Formias niccoli.*		
Formiate of gold. *Formias auri.*		
Formiate of platina. *Formias platini.*		
Formiate of lead. *Formias plumbi.*		
Formiate of potaſh. *Formias potaſſæ.*		
Formiate of ſoda. *Formias ſodæ.*		
Formiate of tungſten. *Formias tunſteni.*		
Formiate of zinc. *Formias zinci.*		

New Names.	G	Old Names.
Gas. *Gas.*		*Gas.* *Elaſtic fluids.* *Aëriform fluids.*
Gas, acetous acid. *Gas acidum acetoſum.*		*Acetous acid gas.*
Gas, carbonic acid. *Gas acidum carbonicum.*		*Fixed air.* *Solid air of Hales.* *Cretaceous acid gas.* *Mephitic gas.* *Aërial acid.*
Gas, fluoric acid. *Gas acidum fluoricum.*		*Sparry acid gas.* *Fluoric acid gas.*
Gas, muriatic acid. *Gas acidum muriaticum.*		*Marine air.* *Marine acid gas.* *Muriatic acid gas.*
Gas, oxigenated muriatic acid. *Gas acidum muriaticum oxigenatum.*		*Aërated muriatic acid gas.* *Dephlogiſticated marine acid.*
Gas, nitrous acid. *Gas acidum nitroſum.*		*Nitrous acid gas.*
Gas, pruſſic acid. *Gas acidum pruſſicum.*		*Pruſſian gas.*
Gas, ſulphureous acid. *Gas acidum ſulphureum.*		*Sulphureous acid gas.* *Vitriolic acid air.*
Gas, ammoniacal. *Gas ammoniacale.*		*Alkaline gas.* *Alkaline air.* *Volatile alkaline gas.*
Gas, azotic. *Gas azoticum.*		*Vitiated air.* *Impure air.* *Phlogiſticated air.* *Phlogiſticated gas.* *Atmoſpheric mephitis.*
Gas, hydrogenous. *Gas hydrogenium.*		*Inflammable gas.* *Inflammable air.* *Phlogiſton of Mr Kirwan.*

H

New Names.	G	Old Names.
Gas, carbonated hydrogenous. *Gas hydrogenium carbonatum.*		*Carbonaceous inflammable gas.*
Gas, hydrogenous, of marſhes. *Gas hydrogenium paludum.*		*Mephitized inflammable gas.* *Inflammable gas of marſhes.*
Gas, phoſphorized hydrogenous. *Gas hydrogenium phoſphoriſatum.*		*Phoſphoric gas.*
Gas, ſulphurated hydrogenous. *Gas hydrogenium ſulphuratum.*		*Hepatic gas.*
Gas nitrous. *Gas nitroſum.*		*Nitrous gas.*
Gas, oxigenous. *Gas oxigenium.*		*Vital air.* *Pure air.* *Dephlogiſticated air.*
Gluten, *or* the glutinous principle. *Gluten.*		*Gluten of farina or of wheat.* *Vegeto-animal matter.*
Gold. *Aurum.*		*Gold.*
	I	
Iron. *Ferrum.*		*Iron.*
	K	
Lactate. *Lactas, tis. ſ. m.*		Salts formed by the union of the acid of ſour whey, or the lactic acid, with different baſes. Theſe ſalts were not known before Scheele; and their properties being as yet but little examined, they have hitherto received no name.

New Names.	L	Old Names:
Lactate of alumine. *Lactas aluminosus.*		
Lactate of ammoniac. *Lactas ammoniacalis.*		
Lactate of antimony. *Lactas stibii.*		
Lactate of silver. *Lactas argenti.*		
Lactate of arsenic. *Lactas arsenicalis.*		
Lactate of barytes. *Lactas baryticus.*		
Lactate of bismuth. *Lactas bismuthi.*		
Lactate of lime. *Lactas calcareus.*		
Lactate of cobalt. *Lactas cobalti.*		
Lactate of copper. *Lactas cupri.*		
Lactate of tin. *Lactas stanni.*		
Lactate of iron. *Lactas ferri.*		
Lactate of magnesia. *Lactas magnesiæ.*		
Lactate of manganese. *Lactas magnesii.*		
Lactate of mercury. *Lactas hydrargyri.*		
Lactate of molybdena. *Lactas molybdeni.*		
Lactate of nickel. *Lactas niccoli.*		
Lactate of gold. *Lactas auri.*		

New Names.	L	Old Names.
Lactate of platina. *Lactas platini.*		
Lactate of lead. *Lactas plumbi.*		
Lactate of potaſh. *Lactas potaſſæ.*		
Lactate of ſoda. *Lactas ſodæ.*		
Lactate of tungſten. *Lactas tunſteni.*		
Lactate of zinc. *Lactas zinci.*		
Lead. *Plumbum.*		*Lead.* *Saturn.*
Light.		*Light.*
Lithiate. *Lithias, tis. ſ. m.*		Salts formed by the union of the lithic acid, or urinary calculus, with different baſes. Theſe ſalts are not comprehended in the ancient Nomenclature, being unknown before Scheele.
Lithiate of alumine. *Lithias aluminoſus.*		
Lithiate of ammoniac. *Lithias ammoniacalis.*		
Lithiate of antimony. *Lithias ſtibii.*		
Lithiate of ſilver. *Lithias argenti.*		
Lithiate of arſenic. *Lithias arſenicalis.*		
Lithiate of barytes. *Lithias baryticus.*		
Lithiate of biſmuth. *Lithias biſmuthi.*		
Lithiate of lime. *Lithias calcareus.*		

New Names.	L	Old Names.
Lithiate of cobalt. *Lithias cobalti.*		
Lithiate of copper. *Lithias cupri.*		
Lithiate of tin. *Lithias ſtanni.*		
Lithiate of iron. *Lithias ferri.*		
Lithiate of magneſia. *Lithias magneſiæ.*		
Lithiate of manganeſe. *Lithias magneſii.*		
Lithiate of mercury. *Lithias hydrargyri.*		
Lithiate of molybdena. *Lithias molybdeni.*		
Lithiate of nickel. *Lithias niccoli.*		
Lithiate of gold. *Lithias auri.*		
Lithiate of platina. *Lithias platini.*		
Lithiate of lead. *Lithias plumbi.*		
Lithiate of potaſh. *Lithias potaſſæ.*		
Lithiate of ſoda. *Lithias ſodæ.*		
Lithiate of tungſten. *Lithias tunſteni.*		
Lithiate of zinc. *Lithias zinci.*		

M

Malate. *Malas, tis. ſ. m.*		Salts formed by the union of the malic acid, or acid of apples, with different baſes. This genus of ſalts has not yet obtained a name in the old Nomenclature.

New Names.	M	Old Names.
Malate of alumine. *Malas aluminosus.*		
Malate of ammoniac. *Malas ammoniacalis.*		
Malate of antimony. *Malas stibii.*		
Malate of silver. *Malas argenti.*		
Malate of arsenic. *Malas arsenicalis.*		
Malate of barytes. *Malas baryticus.*		
Malate of bismuth. *Malas bismuthi.*		
Malate of lime. *Malas calcareus.*		
Malate of cobalt. *Malas cobalti.*		
Malate of copper. *Malas cupri.*		
Malate of tin. *Malas stanni.*		
Malate of iron. *Malas ferri.*		
Malate of magnesia. *Malas magnesiæ.*		
Malate of manganese. *Malas magnesii.*		
Malate of mercury. *Malas hydrargyri.*		
Malate of molybdena. *Malas molybdeni.*		
Malate of nickel. *Malas niccoli.*		
Malate of gold. *Malas auri.*		
Malate of platina. *Malas platini.*		

New Names. M	Old Names.
Malate of lead. *Malas plumbi.*	
Malate of potash. *Malas potassæ.*	
Malate of soda. *Malas sodæ.*	
Malate of tungsten. *Malas tunsteni.*	
Malate of zinc. *Malas zinci.*	
Manganese. *Magnesium.*	*Regulus of manganese.*
Mercury. *Hydrargyrum.*	*Mercury.* *Quicksilver.*
Molybdate. *Molybdas, tis. f. m.*	Salt formed by the union of the molybdic acid with different bases. This genus of salts had no name in the old Nomenclature.
Molybdate of alumine. *Molybdas aluminosus.*	
Molybdate of ammoniac. *Molybdas ammoniacalis.*	
Molybdate of antimony. *Molybdas stibii.*	
Molybdate of silver. *Molybdas argenti.*	
Molybdate of arsenic. *Molybdas arsenicalis.*	
Molybdate of barytes. *Molybdas baryticus.*	
Molybdate of bismuth. *Molybdas bismuthi.*	
Molybdate of lime. *Molybdas calcareus.*	
Molybdate of cobalt. *Molybdas cobalti.*	
Molybdate of copper. *Molybdas cupri.*	

New Names.	M	Old Names.
Molybdate of tin. *Molybdas stanni.*		
Molybdate of iron. *Molybdas ferri.*		
Molybdate of magnesia. *Molybdas magnesiæ.*		
Molybdate of manganese. *Molybdas magnesii.*		
Molybdate of mercury. *Molybdas hydrargyri.*		
Molybdate of nickel. *Molybdas niccoli.*		
Molybdate of gold. *Molybdas auri.*		
Molybdate of platina. *Molybdas platini.*		
Molybdate of lead. *Molybdas plumbi.*		
Molybdate of potash. *Molybdas potassæ.*		
Molybdate of soda. *Molybdas sodæ.*		
Molybdate of tungsten. *Molybdas tunsteni.*		
Molybdate of zinc. *Molybdas zinci.*		
Molybdena.		*Regulus of molybdena.*
Mucus.		*Mucilage.*
Muriate. *Murias, tis, s. m.*		Salt formed by the union of the muriatic acid with different bases
Muriate of alumine. *Murias aluminosus.*		*Marine alum.* *Argillaceous marine salt.*
Muriate of ammoniac. *Murias ammoniacalis.*		*Sal ammoniac.* *Salmiac.*
Muriate of antimony. *Murias stibii.*		*Muriate of antimony.*

M

New Names.	Old Names.
Muriate, fuming, of antimony. *Murias ſtibii ſumans.*	*Butter of antimony.*
Muriate of ſilver. *Murias argenti.*	*Corneous ſilver.* *Luna cornea.*
Muriate of arſenic. *Murias arſenicalis.*	
Muriate, ſublimated, of arſenic. *Murias arſenicalis ſublimatus.*	*Butter of arſenic.*
Muriate of barytes. *Murias baryticus.*	*Barotic marine ſalt.*
Muriate of biſmuth. *Murias biſmuthi.*	*Muriate of biſmuth.*
Muriate, ſublimated, of biſmuth. *Murias biſmuthi ſublimatus.*	*Butter of biſmuth.*
Muriate of lime. *Murias calcareus.*	*Mother water of marine ſalt.* *Calcareous marine ſalt.* *Fixed ſal ammoniac.*
Muriate of cobalt. *Murias cobalti.*	*Ink of ſympathy.*
Muriate of copper. *Murias cupri.*	*Muriate of copper.*
Muriate, ſublimated ammoniacal of copper. *Murias cupri ammoniacalis ſublimatus.*	*Cupreous ammoniacal flowers.*
Muriate of tin. *Murias ſtanni.*	*Salt of Jupiter.*
Muriate, concrete, of tin. *Murias ſtanni concretus.*	*Solid butter of tin of M. Baumé.* *Corneous tin.*
Muriate, fuming, of tin. *Murias ſtanni fumans.*	*Fuming liquor of Libavius.*
Muriate, ſublimated, of tin. *Murias ſtanni ſublimatus.*	*Butter of tin.*
Muriate of iron. *Murias ferri.*	*Muriate of iron.* *Marine ſalt of iron.*

New Names. M	Old Names.
Muriate, ſublimated ammoniacal, of iron. *Murias ferri ammoniacalis ſublimatus.*	*Martial ammoniacal flowers.*
Muriate of magneſia. *Murias magneſiæ.*	*Marine ſalt with a baſe of magneſia.*
Mutiate of manganeſe. *Murias magneſii.*	*Muriate of manganeſe.*
Muriate, corroſive, of mercury. *Murias hydrargyri corroſivus.*	*Corroſive ſublimate.*
Muriate, ſweet, of mercury. *Murias hydrargyri dulcis.*	*Sweet ſublimate.*
Muriate, ſweet ſublimated, of mercury. *Murias hydrargyri ſublimatus.*	*Aquila alba.*
Muriate of mercury and ammoniac. *Murias hydrargyri et ammoniacalis.*	*Sal alembroth.*
Muriate of mercury by precipitation. *Murias hydrargyri præcipitatus.*	*Salt of wiſdom.* *White precipitated muriate.*
Muriate of molybdena. *Murias molybdeni.*	
Muriate of nickel. *Murias niccoli.*	
Muriate of gold. *Murias auri.*	*Muriate of gold.* *Regaline ſalt of gold.*
Muriate of platina. *Murias platini.*	*Muriate of platina.* *Regaline ſalt of platina.*
Muriate of lead. *Murias plumbi.*	*Corneous lead.* *Muriate of lead.*
Muriate of potaſh. *Murias potaſſa.*	*Febrifuge ſalt of Sylvius.*
Muriate of ſoda. *Murias ſodæ.*	*Marine ſat.*

New Names.	M	Old Names.
Muriate, foſſil, of ſoda. *Murias ſodæ foſſilis.*	}	*Sal gem.*
Muriate of tungſten. *Murias tunſteni.*		
Muriate of zinc. *Murias zinci.*	}	*Marine ſalt of zinc.* *Muriate of zinc.*
Muriate, ſublimated, of zinc. *Murias zinci ſublimatus.*	}	*Butter of zinc.*
Muriates, oxigenated.	}	New combinations of the oxigenated muriatic acid with potaſh and ſoda, diſcovered by M. Berthollet.
Muriate, oxigenated, of potaſh. *Murias oxigenatus potaſſæ.*		
Muriate, oxigenated, of ſoda. *Murias oxigenatus ſodæ.*		

N

Nitrate. *Nitras, tis. ſ. m.*	}	Salts formed by the combination of the nitric acid with different baſes.
Nitrate of alumine. *Nitras aluminoſus.*	}	*Nitrous alum.* *Argillaceous nitre.*
Nitrate of ammoniac. *Nitras ammoniacalis.*	}	*Ammoniacal nitrous ſalt.* *Ammoniacal nitre.*
Nitrate of antimony. *Nitras ſtibii.*		
Nitrate of ſilver. *Nitras argenti.*	}	*Lunar nitre.* *Nitre of ſilver.* *Cryſtals of the moon.*
Nitrate, melted, of ſilver. *Nitras argenti fuſus.*	}	*Infernal ſtone.*
Nitrate of arſenic. *Nitras arſenicalis.*	}	*Nitre of arſenic.*

New Names.	N Old Names.
Nitrate of barytes. *Nitras baryticus.*	*Nitre of ponderous earth.* *Barotic nitre.*
Nitrate of bismuth. *Nitras bismuthi.*	*Nitre of bismuth.*
Nitrate of lime. *Nitras calcareus.*	*Calcareous nitre.* *Mother water of nitre.*
Nitrate of cobalt. *Nitras cobalti.*	*Nitre of cobalt.*
Nitrate of copper. *Nitras cupri.*	*Nitrate of copper.*
Nitrate of tin. *Nitras stanni.*	*Nitre of tin.* *Stanno-nitrous salt.*
Nitrate of iron. *Nitras ferri.*	*Nitre of iron.* *Martial nitre.*
Nitrate of magnesia. *Nitras magnesiæ.*	*Nitre of magnesia.* *Magnesian nitre.*
Nitrate of manganese. *Nitras magnesii.*	*Nitre of manganese.*
Nitrate of mercury. *Nitras hydrargyri.*	*Mercurial nitre.* *Nitre of mercury.*
Nitrate of mercury in a state of solution *Nitras hydrargyri solutus.*	*Mercurial water.*
Nitrate of molybdena. *Nitras molybdeni.*	
Nitrate of nickel. *Nitras niccoli.*	*Nitre of nickel.*
Nitrate of gold. *Nitras auri.*	
Nitrate of platina. *Nitras platini.*	
Nitrate of lead. *Nitras plumbi.*	*Nitre of lead.* *Saturnine nitre*
Nitrate of potash, *or* nitre. *Nitras potassæ,* vel *nitrum.*	*Nitre.* *Saltpetre.*

New Names.	N	Old Names.
Nitrate of ſoda. *Nitras ſodæ.*		*Cubic nitre.* *Rhomboidal nitre.*
Nitrate of tungſten. *Nitras tunſteni.*		
Nitrate of zinc. *Nitras zinci.*		*Nitre of zinc.*
Nitrite. *Nitris, tis. ſ. m.*		Salt formed by the combination of the *nitrous* * acid with different baſes. This genus of ſalts had no name in the old Nomenclature, being unknown before the late diſcoveries.
Nitrite of alumine. *Nitris aluminoſus.*		
Nitrite of ammoniac. *Nitris ammoniacalis.*		
Nitrite of antimony. *Nitris ſtibii.*		
Nitrite of ſilver. *Nitris argenti.*		
Nitrite of arſenic. *Nitris arſenicalis.*		
Nitrite of barytes. *Nitris baryticus.*		
Nitrite of biſmuth. *Nitris biſmuthi.*		
Nitrite of lime. *Nitris calcareus.*		
Nitrite of cobalt. *Nitris cobalti.*		
Nitrite of copper. *Nitris cupri.*		
Nitrite of tin. *Nitris ſtanni.*		

* That is, with ſpirit of nitre containing leſs oxigene than *nitric* acid, which forms *nitrates.*

New Names.	N	Old Names.
Nitrite of iron. *Nitris ferri.*		
Nitrite of magnesia. *Nitris magnesiæ.*		
Nitrite of manganese. *Nitris magnesii.*		
Nitrite of mercury. *Nitris hydrargyri.*		
Nitrite of molybdena. *Nitris molybdeni.*		
Nitrite of nickel. *Nitris niccoli.*		
Nitrite of gold. *Nitris auri.*		
Nitrite of platina. *Nitris platini.*		
Nitrite of lead. *Nitris plumbi.*		
Nitrite of potash. *Nitris potassæ.*		
Nitrite of soda. *Nitris sodæ.*		
Nitrite of tungsten. *Nitris tunsteni.*		
Nitrite of zinc. *Nitris zinci.*		

	O	
Oils, empyreumatic. *Olea empyreumatica.*		*Empyreumatic oils.*
Oils, fixed. *Olea fixa.*		*Fat oils.* *Sweet oils.* *Oils obtained by expression.*
Oils, volatile. *Olea volatilia.*		*Essential oils.* *Essences.*

New Names. N	Old Names.
Oxalate. *Oxalas, tis. ſ. m.*	Salt formed by the combination of the oxalic acid with different baſes. Scarce any of the ſalts of this genus had a name in the old Nomenclature.
Oxalate, acidulous, of ammoniac. *Oxalas acidulus ammoniacalis.*	
Oxalate, acidulous, of potaſh. *Oxalas acidulus potaſſæ.*	*Salt of ſorrel of commerce.*
Oxalate, acidulous, of ſoda. *Oxalas acidulus ſodæ.*	
Oxalate of alumine. *Oxalas aluminoſus.*	
Oxalate of ammoniac. *Oxalas ammoniacalis.*	
Oxalate of antimony. *Oxalas ſtibii.*	
Oxalate of ſilver. *Oxalas argenti.*	
Oxalate of arſenic. *Oxalas arſenicalis.*	
Oxalate of barytes. *Oxalas baryticus.*	
Oxalate of biſmuth. *Oxalas biſmuthi.*	
Oxalate of lime. *Oxalas calcareus.*	
Oxalate of cobalt. *Oxalas cobalti.*	
Oxalate of copper. *Oxalas cupri.*	
Oxalate of tin. *Oxalas ſtanni.*	
Oxalate of iron. *Oxalas ferri.*	
Oxalate of magneſia. *Oxalas magneſiæ.*	

New Names.	C	Old Names.
Oxalate of manganeſe. *Oxalas magneſii.*		
Oxalate of mercury. *Oxalas hydrargyri.*		
Oxalate of molybdena. *Oxalas molybdeni.*		
Oxalate of nickel. *Oxalas niccoli.*		
Oxalate of gold. *Oxalas auri.*		
Oxalate of platina. *Oxalas platini.*		
Oxalate of lead. *Oxalas plumbi.*		
Oxalate of potaſh. *Oxalas potaſſæ.*		
Oxalate of ſoda. *Oxalas ſodæ.*		
Oxalate of tungſten. *Oxalas tunſteni.*		
Oxalate of zinc. *Oxalas zinci.*		
Oxide, arſenical, of potaſh. *Oxidum arſenicale potaſſæ.*		*Liver of arſenic.*
Oxide, white, of arſenic. *Oxidum arſenici album.*		*White arſenic.* *Calx of arſenic.*
Oxide of antimony, BY THE MURIATIC AND NITRIC ACIDS. *Oxidum ſtibii acidis muriatico et nitrico confectum.*		*Mineral bezoar.*
Oxide of antimony, white, by nitre. *Oxidum ſtibii album nitro confectum.*		*Diaphoretic antimony.* *Ceruſe of antimony.* *Materia perlata of Kerkringius.*
Oxide, white ſublimated, of antimony. *Oxidum ſtibii album ſublimatum.*		*Snow of antimony* *Flowers of antimony.* *Silver flowers of regulus of antimony.*

New Names O	Old Names.
Oxide of antimony, by the muriatic acid. *Oxidum ſtibii acido muriatico confectum.*	*Powder of Algareth.*
Oxide, ſulphurated, of antimony. *Oxidum ſtibii ſulphuratum.*	*Liver of antimony.*
Oxide, ſulphurated ſemi-vitreous, of antimony. *Oxidum ſtibii ſulphuratum ſemi-vitreum.*	*Saffron of metals.*
Oxide, orange-coloured ſulphurated, of antimony. *Oxidum ſtibii ſulphuratum aurantiacum.*	*Gilded ſulphur of antimony.*
Oxide, red ſulphurated, of antimony. *Oxidum ſtibii ſulphuratum rubrum.*	*Kermes mineral.*
Oxide, vitreous ſulphurated, of antimony. *Oxidum ſtibii ſulphuratum vitreum.*	*Glaſs of antimony.*
Oxide, brown vitreous ſulphurated, of antimony. *Oxidum ſtibii ſulphuratum vitreum fuſcum.*	*Rubine of antimony.*
Oxide, white ſublimated, of arſenic. *Oxidum arſenici album ſublimatum.*	*Flowers of arſenic.*
Oxide, yellow ſulphurated, of arſenic. *Oxidum arſenici ſulphuratum luteum.*	*Orpiment.*
Oxide, red ſulphurated, of arſenic. *Oxidum arſenici ſulphuratum rubrum.*	*Red arſenic.* *Realgar*, or *realgal.*

New Names. O	Old Names.
Oxide, white, of bismuth, by the nitric acid. *Oxidum bismuthi album acido nitrico confectum.*	*Magistery of bismuth.* *White paint.*
Oxide, sublimated, of bismuth. *Oxidum bismuthi sublimatum.*	*Flowers of bismuth.*
Oxide, grey, of cobalt with silex, *or* zaffre. *Oxidum cobalti cinereum cum silice.*	*Zaffre.*
Oxide, vitreous, of cobalt. *Oxidum cobalti vitreum.*	*Azure.* *Smalt.*
Oxide, green acetated, of copper. *Oxidum cupri viride acetatum.*	*Verdigrise.* *Rust of copper.*
Oxide, grey, of tin. *Oxidum stanni cinereum.*	*Putty of tin.*
Oxide, sublimated, of tin. *Oxidum stanni sublimatum.*	*Flowers of tin.*
Oxides of iron. *Oxida ferri.*	*Saffrons of Mars.*
Oxide, brown, of iron. *Oxidum ferri fuscum.*	*Astringent saffron of Mars.*
Oxide, yellow, of iron. *Oxidum ferri luteum.*	*Ochre.*
Oxide, black, of iron. *Oxidum ferri nigrum.*	*Martial Ethiops.*
Oxide, red, of iron. *Oxidum ferri rubrum.*	*Colcothar.*
Oxide, white, of manganese. *Oxidum magnesii album.*	*White calx of manganese.*
Oxide, black, of manganese. *Oxidum magnesii nigrum.*	*Black magnesia.* *Glass-makers soap.* *Stone of Perigueux.*
Oxide, yellow, of mercury, by the nitric acid. *Oxidum hydrargyri luteum acido nitrico confectum.*	*Nitrous turbith.*

New Names. B	Old Names.
Oxide, yellow, of mercury by the sulphuric acid. *Oxidum hydrargyri luteum acido sulphurico confectum.*	*Mineral turbith. Yellow precipitate.*
Oxide, blackish, of mercury. *Oxidum hydrargyri nigrum.*	*Ethiops* per se.
Oxide, red, of mercury by the nitric acid. *Oxidum hydrargyri rubrum. acido nitrico confectum.*	*Red precipitate.*
Oxide, red, of mercury by fire. *Oxidum hydrargyri rubrum per ignem.*	*Precipitate* per se.
Oxide, black sulphurated, of mercury. *Oxidum hydrargyri sulphuratum nigrum.*	*Mineral ethiops.*
Oxide, red sulphurated, of mercury. *Oxidum hydrargyri sulphuratum rubrum.*	*Cinnabar.*
Oxide, ammoniacal, of gold. *Oxidum auri ammoniacale.*	*Fulminating gold.*
Oxide of gold by tin. *Oxidum auri per stannum.*	*Precipitate of gold by tin. Purple of Cassius.*
Oxides of lead. *Oxida plumbi.*	*Calces of lead.*
Oxide, white, of lead by the acetous acid. *Oxidum plumbi album per acidum acetosum.*	*White of lead.*
Oxide, semi-vitreous, of lead, *or* litharge. *Oxidum plumbi semi-vitreum.*	*Litharge.*
Oxide, yellow, of lead. *Oxidum plumbi luteum.*	*Massicot.*
Oxide, red, of lead, *or* minium. *Oxidum plumbi rubrum.*	*Minium.*

New Names.	S	Old Names.
Oxide, ſublimated, of zinc. *Oxidum zinci ſublimatum.*		*Philoſophic wool. Philoſophic cotton. Flowers of zinc. Pompholyx.*
Oxides, metallic. *Oxida metallica.*		*Metallic calces.*
Oxides, metallic ſublimated. *Oxida metallica ſublimata.*		*Metallic flowers.*
Oxygene. *Oxygenium.*		*Oxygene. Baſe of vital air. Acidifying principle. Empyreal air. Principium ſorbile.*

P

Phoſphate. *Phoſphas, tis. ſ. m.*		Salt formed by the union of the phoſphoric acid with different baſes.
Phoſphate of alumine. *Phoſphas aluminoſus.*		
Phoſphate of ammoniac. *Phoſphas ammoniacalis.*		*Phoſphoric ammoniac. Ammoniacal phoſphate.*
Phoſphate of antimony. *Phoſphas ſtibii.*		
Phoſphate of ſilver. *Phoſphas argenti.*		
Phoſphate of arſenic. *Phoſphas arſenicalis.*		
Phoſphate of barytes. *Phoſphas baryticus.*		
Phoſphate of biſmuth. *Phoſphas biſmuthi.*		
Phoſphate, calcareous, or of lime. *Phoſphas calcareus.*		*Earth of bones. Calcareous phoſphate. Animal earth.*

C

New Names.	Old Names.
Phoſphate of cobalt. *Phoſphas cobalti.*	
Phoſphate of copper. *Phoſphas cupri.*	
Phoſphate of tin. *Phoſphas ſtanni.*	
Phoſphate of iron. *Phoſphas ferri.*	*Syderite.* *Iron of water.* *Ore of iron from marſhes.*
Phoſphate of magneſia. *Phoſphas magneſiæ.*	*Phoſphate of magneſia.*
Phoſphate of mangaueſe. *Phoſphas magneſii.*	
Phoſphate of mercury. *Phoſphas hydrargyri.*	*Roſe precipitate of Lemery.*
Phoſphate of molybdena. *Phoſphas molybdeni.*	
Phoſphate of nickel. *Phoſphas niccoli.*	
Phoſphate of gold. *Phoſphas auri.*	
Phoſphate of platina. *Phoſphas platini.*	
Phoſphate of lead. *Phoſphas plumbi.*	
Phoſphate of potaſh. *Phoſphas potaſſæ.*	
Phoſphate of ſoda. *Phoſphas ſodæ.*	
Phoſphate of ſoda and ammoniac. *Phoſphas ſodæ et ammoniacalis.*	*Native ſalt of urine.* *Fuſible ſalts of urine.*
Phoſphate, ſuperſaturated, of ſoda. *Phoſphas ſuperſaturatus ſodæ.*	*Sal admirabile perlatum.*

New Names.	P	Old Names.
Phosphate of tungsten. *Phosphas tunsteni.*		
Phosphate of zinc. *Phosphas zinci.*		
Phosphite. *Phosphis, tis. s. m.*		Salt formed by the union of the phosphorous acid with different bases.
Phosphite of alumine. *Phosphis aluminosus.*		
Phosphite of ammoniac. *Phosphis ammoniacalis.*		
Phosphite antimony. *Phosphis stibii.*		
Phosphite of silver. *Phosphis argenti.*		
Phosphite of arsenic. *Phosphis arsenicalis.*		
Phosphite of barytes. *Phosphis baryticus.*		
Phosphite of bismuth. *Phosphis bismuthi.*		
Phosphite of lime. *Phosphis calcareus.*		
Phosphite of cobalt. *Phosphis cobalti.*		
Phosphite of copper. *Phosphis cupri.*		
Phosphite of tin. *Phosphis stanni.*		
Phosphite of iron. *Phosphis ferri.*		
Phosphite of magnesia. *Phosphis magnesiæ.*		
Phosphite of manganese. *Phosphis magnesii.*		
Phosphite of mercury. *Phosphis hydrargyri.*		

New Names.	P	Old Names.
Phoſphite of molybdena. *Phoſphis molybdeni.*		
Phoſphite of nickel. *Phoſphis niccoli.*		
Phoſphite of gold. *Phoſphis auri.*		
Phoſphite of platina. *Phoſphis platini.*		
Phoſphite of lead. *Phoſphis plumbi.*		
Phoſphite of potaſh. *Phoſphis potaſſæ.*		
Phoſphite of ſoda. *Phoſphis ſodæ.*		
Phoſphite of tungſten. *Phoſphis tunſteni.*		
Phoſphite of zinc. *Phoſphis zinci.*		
Phoſphorus. *Phoſphorum.*		*Phoſphorus of Kunckel.*
Phoſphure. *Phoſphoretum.*		Combination of non-oxigenated phoſphorus with different baſes.
Phoſphure of copper. *Phoſphoretum cupri.*		
Phoſphure of iron. *Phoſphoretum ferri.*		*Syderum of Bergman.* *Syderotete of M. de Morveau.* *Regulus of ſyderite.*
Pyro-lignite. *Pyro lignis, tis. ſ. m*		Salt formed by the union of the pyro-ligneous acid with different baſes. These ſalts had no name in the old Nomenclature.
Pyro-lignite of alumine. *Pyro-lignis aluminoſus.*		
Pyro-lignite of ammoniac. *Pyro-lignis ammoniacalis.*		

New Names.	P	New Names.

Pyro-lignite of antimony.
Pyro-lignis stibii.

Pyro-lignite of silver.
Pyro-lignis argenti.

Pyro-lignite of arsenic.
Pyro-lignis arsenicalis.

Pyro-lignite of barytes.
Pyro-lignis baryticus.

Pyro-lignite of bismuth.
Pyro-lignis bismuthi.

Pyro-lignite of lime.
Pyro-lignis calcareus.

Pyro-lignite of cobalt.
Pyro-lignis cobalti.

Pyro-lignite of copper.
Pyro-lignis cupri.

Pyro-lignite of tin.
Pyro-lignis stanni.

Pyro-lignite of iron.
Pyro-lignis ferri.

Pyro-lignite of magnesia.
Pyro-lignis magnesiæ.

Pyro-lignite of manganese.
Pyro lignis magnesii.

Pyro-lignite of mercury.
Pyro-lignis hydrargyri.

Pyro-lignite of molybdena.
Pyro-lignis molybdeni.

Pyro-lignite of nickel.
Pyro-lignis niccoli.

Pyro-lignite of gold.
Pyro-lignis auri.

Pyro-lignite of platina.
Pyro-lignis platini.

Pyro-lignite of lead.
Pyro-lignis plumbi.

Pyro-lignite of potash.
Pyro-lignis potassæ.

New Names.	P	Old Names.
Pyro-lignite of ſoda. *Pyro-lignis ſodæ.*		
Pyro-lignite of tungſten. *Pyro-lignis tunſteni.*		
Pyro-lignite of zinc. *Pyro-lignis zinci.*		
Pyro-mucites. *Pyro-mucis.*		Salts formed by the union of the pyro-mucous acid with different baſes. This ſpecies of ſalts has not yet obtained a name in the old Nomenclature.
Pyro-mucite of alumine. *Pyro-mucis aluminoſus.*		
Pyro-mucite of ammoniac. *Pyro-mucis ammoniacalis.*		
Pyro-mucite of antimony. *Pyro-mucis ſtibii.*		
Pyro-mucite of ſilver. *Pyro-mucis argenti.*		
Pyro-mucite of arſenic. *Pyro-mucis arſenicalis.*		
Pyro-mucite of barytes. *Pyro-mucis baryticus.*		
Pyro-mucite of biſmuth. *Pyro-mucis biſmuthi.*		
Pyro-mucite of lime. *Pyro-mucis calcareus.*		
Pyro-mucite of cobalt. *Pyro-mucis cobalti.*		
Pyro-mucite of copper. *Pyro-mucite of copper.*		
Pyro-mucite of tin. *Pyro-mucis ſtanni.*		
Pyro-mucite of iron. *Pyro-mucis ferri.*		

New Names.	P	Old Names.
Pyro-mucite of magnesia. *Pyro-mucis magnesiæ.*		
Pyro-mucite of manganese. *Pyro-mucis magnesii.*		
Pyro-mucite of mercury. *Pyro-mucis hydrargyri.*		
Pyro-mucite of molybdena. *Pyro-mucis molybdeni.*		
Pyro-mucite of nickel. *Pyro-mucis niccoli.*		
Pyro-mucite of gold. *Pyro-mucis auri.*		
Pyro-mucite of platina. *Pyro-mucis platini.*		
Pyro-mucite of lead. *Pyro-mucis plumbi.*		
Pyro-mucite of potash. *Pyro-mucis potassæ.*		
Pyro-mucite of soda. *Pyro-mucis sodæ.*		
Pyro-mucite of tungsten. *Pyro-mucis tunsteni.*		
Pyro-mucite of zinc. *Pyro-mucis zinci.*		
Pyro-tartarites. *Pyro-tartaris, tis. f. m.*		Salts formed by the union of the pyro-tartareous acid with different bases.
Pyro-tartarite of alumine. *Pyro-tartaris aluminosus.*		
Pyro-tartarite of ammoniac. *Pyro-tartaris ammoniacalis.*		
Pyro-tartarite of antimony. *Pyro-tartaris stibii.*		
Pyro-tartarite of silver. *Pyro-tartaris argenti.*		
Pyro-tartarite of arsenic. *Pyro-tartaris arsenicalis.*		

New Names.	P	Old Names.
Pyro-tartarite of barytes. *Pyro-tartaris baryticus.*		
Pyro-tartarite of bismuth. *Pyro-tartaris bismuthi.*		
Pyro-tartarite of lime. *Pyro-tartaris calcareus.*		
Pyro-tartarite of cobalt. *Pyro-tartaris cobalti.*		
Pyro-tartarite of copper. *Pyro-tartaris cupri.*		
Pyro-tartarite of tin. *Pyro-tartaris stanni.*		
Pyro-tartarite of iron. *Pyro-tartaris ferri.*		
Pyro-tartarite of magnesia. *Pyro-tartaris magnesiæ.*		
Pyro-tartarite of manganese. *Pyro-tartaris magnesii.*		
Pyro-tartarite of mercury. *Pyro-tartaris hydrargyri.*		
Pyro-tartarite of molybdena. *Pyro-tartaris molybdeni.*		
Pyro-tartarite of nickel. *Pyro-tartaris niccoli.*		
Pyro-tartarite of gold. *Pyro-tartaris auri.*		
Pyro-tartarite of platina. *Pyro-tartaris platini.*		
Pyro-tartarite of lead. *Pyro-tartaris plumbi.*		
Pyro-tartarite of potash. *Pyro-tartaris potassæ.*		
Pyro-tartarite of soda. *Pyro-tartaris sodæ.*		
Pyro-tartarite of tungsten. *Pyro-tartaris tunsteni.*		
Pyro tartarite of zinc. *Pyro tartaris zinci.*		

New Names.	P Old Names.
Platina. *Platinum.*	*Juan blanca.* *Platina.* *Platina del pinto.*
Potaſh. *Potaſſa, æ.*	*Vegetable cauſtic fixed alkali.*
Potaſh, melted. *Potaſſa fuſa.*	*Lapis cauſticus.*
Potaſh, ſiliceous fluid. *Potaſſa ſilicea fluida.*	*Liquor of flints.*
Pruſſiate. *Pruſſias, tis. ſ. m.*	Salts formed by the union of the Pruſſic acid, or colouring matter of Pruſſian blue, with different baſes. This genus of ſalts had no name in the old Nomenclature.
Pruſſiate of alumine. *Pruſſias aluminoſus.*	
Pruſſiate of ammoniac. *Pruſſias ammoniacalis.*	
Pruſſiate of antimony. *Pruſſias ſtibii.*	
Pruſſiate of ſilver. *Pruſſias argenti.*	
Pruſſiate of arſenic. *Pruſſias arſenicalis.*	
Pruſſiate of barytes. *Pruſſias baryticus.*	
Pruſſiate of biſmuth. *Pruſſias biſmuthi.*	
Pruſſiate of lime. *Pruſſias calcareus.*	*Calcareous pruſſiate.* *Pruſſian lime-water.*
Pruſſiate of cobalt. *Pruſſias cobalti.*	
Pruſſiate of copper. *Pruſſias cupri.*	
Pruſſiate of tin. *Pruſſias ſtanni.*	

New Names.	P	Old Names.
Pruſſiate of iron. *Pruſſias ferri.*		*Pruſſian blue.* *Berlin blue.*
Pruſſiate of magneſia. *Pruſſias magneſiæ.*		
Pruſſiate of manganeſe. *Pruſſias magneſii.*		
Pruſſiate of mercury. *Pruſſias hydrargyri.*		
Pruſſiate of molybdena. *Pruſſias molybdeni.*		
Pruſſiate of nickel. *Pruſſias niccoli.*		
Pruſſiate of gold. *Pruſſias auri.*		
Pruſſiate of platina. *Pruſſias platini.*		
Pruſſiate of lead. *Pruſſias plumbi.*		
Pruſſiate of potaſh. *Pruſſias potaſſæ.*		*Liquor ſaturated with the colouring part of Pruſſian blue.*
Pruſſiate, ferruginous ſaturated, of potaſh. *Pruſſias potaſſæ ferruginoſus ſaturatus.*		*Pruſſian alkali.*
Pruſſiate, ferruginous, not ſaturated, of potaſh. *Pruſſias potaſſæ ferruginoſus non ſaturatus.*		*Phlogiſticated alkali.*
Pruſſiate of ſoda. *Pruſſias ſodæ.*		
Pyrophorus of Homberg. *Pyrophorum Hombergii.*		*Pyrophorus of Homberg.*
	R	
Reſins. *Reſinæ.*		*Reſins.*

New Names.	S	Old Names.
Saccho-late. *Sacchəlas, tis. f. m.*		Salts formed by the union of the faccho-lactic acid with different bafes. This fpecies of falts has no name in the old Nomenclature.
Saccho-late of alumine. *Saccholas aluminofus.*		
Saccho-late of ammoniac. *Saccholas ammoniacalis.*		
Saccho-late of antimony. *Saccholas ftibii.*		
Saccho-late of fulphur. *Saccholas argenti.*		
Saccho-late of arfenic. *Saccholas arfenicalis.*		
Saccho-late of barytes. *Saccholas baryticus.*		
Saccho-late of bifmuth. *Saccholas bifmuthi.*		
Saccho-late of lime. *Saccholas calcareus.*		
Saccho-late of cobalt. *Saccholas cobalti.*		
Saccho-late of copper. *Saccholas cupri.*		
Saccho-late of tin. *Saccholas ftanni.*		
Saccho-late of iron. *Saccholas ferri.*		
Saccho-late of magnefia. *Saccholas magnefiæ.*		
Saccho-late of manganefe. *Saccholas magnefii.*		
Saccho-late of mercury. *Saccholas hydrargyri.*		

New Names.	S	Old Names.
Saccho-late of molybdena. *Saccholas molybdeni.*		
Saccho-late of nickel. *Saccholas niccoli.*		
Saccho-late of gold. *Saccholas auri.*		
Saccho-late of platina. *Saccholas platini.*		
Saccho-late of lead. *Saccholas plumbi.*		
Saccho-late of potaſh. *Saccholas potaſſæ.*		
Saccho-late of ſoda. *Saccholas ſodæ.*		
Saccho-late of tungſten. *Saccholas tunſteni.*		
Saccho-late of zinc. *Saccholas zinci.*		
Saponulæ. *Saponuli.*		Combinations of volatile or eſſential oils with different baſes.
Saponulæ, acid. *Saponuli acidi.*		Combinations of volatile or eſſential oils with different acids.
Saponula of alumine. *Saponulus aluminoſus.*		Soap compoſed of volatile oil, combined with the baſe of alum.
Saponula, ammoniacal. *Saponulus ammoniacalis.*		Soap compoſed of volatile oil, combined with ammoniac.
Saponula of barytes. *Saponulus barytæ.*		Soap compoſed of volatile oil, combined with barytes.
Saponula of lime. *Saponulus calcareus.*		Soap compoſed of volatile oil, combined with lime.
Saponula of potaſh. *Saponulus potaſſa.*		Soap compoſed of volatile oil, combined with potaſh, or *ſoap of Starkey.*
Saponulæ of ſoda. *Saponuli ſodæ,*		Soaps compoſed of volatile oils, combined with fixed mineral alkali, or ſoda.
Saponulæ, metallic. *Saponuli metallici.*		Soaps compoſed of volatile oils, united to metallic ſubſtances.

New Names.	S	Old Names.
Sebate. *Sebas, tis. s. m.*		Salts formed by the union of the acid of greaſe, or the ſebacic acid, with different baſes. Theſe ſalts have no name in the ancient Nomenclature.
Sebate of alumine. *Sebas aluminoſus.*		
Sebate of ammoniac. *Sebas ammonicalis.*		
Sebate of antimony. *Sebas ſtibii.*		
Sebate of ſilver. *Sebas argenti.*		
Sebate of arſenic. *Sebas arſenicalis.*		
Sebate of barytes. *Sebas baryticus.*		
Sebate of biſmuth. *Sebas biſmuthi.*		
Sebate of lime. *Sebas calcareus.*		
Sebate of cobalt. *Sebas cobalti.*		
Sebate of copper. *Sebas cupri.*		
Sebate of tin. *Sebas ſtanni.*		
Sebate of iron. *Sebas ferri.*		
Sebate of magneſia. *Sebas magneſiæ.*		
Sebate of manganeſe. *Sebas magneſii.*		
Sebate of mercury. *Sebas hydrargyri.*		
Sebate of molybdena. *Sebas molybdeni.*		

New Names.	S	Old Names.
Sebate of nickel. *Sebas niccoli.*		
Sebate of gold. *Sebas auri.*		
Sebate of platina. *Sebas platini.*		
Sebate of lead. *Sebas plumbi.*		
Sebate of potash. *Sebas potassæ.*		
Sebate of soda. *Sebas sodæ.*		
Sebate of tungsten. *Sebas tunsteni.*		
Sebate of zinc. *Sebas zinci.*		
Semi-metals.		*Semi-metals.*
Silex, *or* siliceous earth. *Silica, terra silicea.*		*Quartzose earth. Siliceous earth. Vitrifiable earth.*
Silver. *Argentum.*		*Diana. Luna. Silver.*
Soaps. *Sapones.*		Combinations of fat or fixed oils with different bases.
Soaps, acid. *Sapones acidi.*		Combinations of fat or fixed oils with different acids.
Soap of alumine. *Sapo aluminosus.*		Soap composed of fixed oil, combined with alumine.
Soap, ammoniacal. *Sapo ammoniacalis.*		Soap composed of fixed oil, combined with volatile alkali.
Soap of barytes. *Sapo baryticus.*		Soap composed of fixed oil, combined with barytes.
Soap of lime. *Sapo calcareus.*		Soap composed of fixed oil, combined with lime.
Soap of magnesia. *Sapo magnesiæ.*		Soap composed of fixed oil, combined with magnesia.

New Names. S	Old Names.
Soap of potash. *Sapo potassæ.*	Soap composed of fixed oil, combined with fixed vegetable alkali.
Soap of soda. *Sapo sodæ.*	Soap composed of fixed oil, combined with fixed mineral alkali.
Soaps, metallic. *Sapones metallici.*	Combinations of fat or fixed oils with metallic substances.
Soda. *Soda.*	*Caustic soda. Marine alkali. Mineral alkali.*
Starch. *Amylum.*	*Starch.*
Steel. *Chalybs.*	*Steel.*
Succinate. *Succinas, tis. f. m.*	Salts formed by the combination of the succinic acid with different bases.
Succinate of alumine. *Succinas aluminosus.*	
Succinate of ammoniac. *Succinas ammoniacalis.*	
Succinate of antimony. *Succinas stibii.*	
Succinate of arsenic. *Succinas arsenicalis.*	
Succinate of barytes. *Succinas baryticus.*	
Succinate of bismuth. *Succinas bismuthi.*	
Succinate of lime. *Succinas calcareus.*	
Succinate of cobalt. *Succinas cobalti.*	
Succinate of copper. *Succinas cupri.*	
Succinate of tin. *Succinas stanni.*	
Succinate of iron. *Succinas ferri.*	

S

New Names.	Old Names.
Succinate of magneſia. *Succinas magneſiæ.*	
Succinate of manganeſe. *Succinas magneſii.*	
Succinate of mercury. *Succinas hydrargyri.*	
Succinate of molybdena. *Succinas molybdeni.*	
Succinate of nickel. *Succinas niccoli.*	
Succinate of gold. *Succinas auri.*	
Succinate of platina. *Succinas platini.*	
Succinate of lead. *Succinas plumbi.*	
Succinate of potaſh. *Succinas potaſſæ.*	
Succinate of ſoda. *Succinas ſodæ.*	
Succinate of tungſten. *Succinas tunſteni.*	
Succinate of zinc. *Succinas zinci.*	
Succinum, or amber. *Succinum.*	*Karabeum.* *Yellow amber.* *Amber.*
Sugar. *Saccharum.*	*Sugar.*
Sugar, cryſtalliſed. *Saccharum cryſtalliſatum.*	*Sugar candy.*
Sugar of milk. *Saccharum lactis.*	*Sugar of milk.* *Salt of milk.*

New Names.	S	Old Names.
Sulphates. *Sulphas, tis. ſ. m.*		Salts formed by the combination of the ſulphuric acid with different baſes.
Sulphate of alumine. *Sulphas aluminoſus.*		*Alum.* *Argillaceous vitriol.*
Sulphate, ammoniacal. *Sulphas ammoniacalis.*		*Ammoniacal vitriolic ſalt.* *Ammoniacal ſalt (ſecret of Glauber's.)* *Ammoniacal vitriol.*
Sulphate of antimony. *Sulphas ſtibii.*		*Vitriol of antimony.*
Sulphate of ſilver. *Sulphas argenti.*		*Vitriol of ſilver.* *Vitriol of luna.*
Sulphate of arſenic. *Sulphas arſenicalis.*		*Vitriol of arſenic.*
Sulphate of barytes. *Sulphas baryticus.*		*Ponderous ſpar.* *Barotic vitriol.*
Sulphate of biſmuth. *Sulphas biſmuthi.*		*Vitriol of biſmuth.*
Sulphate of lime. *Sulphas calcareus.*		*Vitriol of lime.* *Calcareous vitriol.* *Selenite.* *Gypſum.*
Sulphate of cobalt. *Sulphas cobalti.*		*Vitriol of cobalt.*
Sulphate of copper. *Sulphas cupri.*		*Vitriol of Cyprus.* *Blue vitriol.* *Vitriol of copper, or of Venus.* *Blue copperas.*
Sulphate of tin. *Sulphas ſtanni.*		*Vitriol of tin.*
Sulphate of iron. *Sulphas ferri.*		*Martial vitriol.* *Green vitriol.* *Vitriol of iron.* *Green copperas.*

New Names.	N	Old Names.
Sulphate of magnefia. *Sulphas magnefiæ.*		*Magnefian vitriol.* *Bitter cathartic falt.* *Epfom falt.* *Salt* (de canal). *Salt of Seydfchutz.* *Salt of Sedlitz.*
Sulphate of manganefe. *Sulphas magnefii.*		*Vitriol of manganefe.*
Sulphate of mercury. *Sulphas hydrargyri.*		*Vitriol of mercury.*
Sulphate of molybdena. *Sulphas molybdeni.*		
Sulphate of nickel. *Sulphas niccoli.*		
Sulphate of gold. *Sulphas auri.*		
Sulphate of platina. *Sulphas platini.*		
Sulphate of lead. *Sulphas plumbi.*		*Vitriol of lead.*
Sulphate of potafh. *Sulphas potaffæ.*		*Vitriol of potafh.* *Sal de duobus.* *Vitriolated tartar.* *Arcanum duplicatum.* *Sal polychreft of Glafer.*
Sulphate of foda. *Sulphas fodæ.*		*Glauber's falt.* *Vitriol of foda.*
Sulphate of tungften. *Sulphas tunfteni.*		
Sulphate of zinc. *Sulphas zinci.*		*Vitriol of zinc.* *White vitriol.* *Vitriol of Goflar.* *White copperas.*
Sulphite. *Sulphis, tis.*		Salt formed by the combination of the fulphureous acid with different bafes.

New Names.	N	Old Names.
Sulphite of alumine. *Sulphis aluminosus.*		
Sulphite of ammoniac. *Sulphis ammoniacalis.*		
Sulphite of antimony. *Sulphis stibii.*		
Sulphite of silver. *Sulphis argenti.*		
Sulphite of arsenic. *Sulphis arsenicalis.*		
Sulphite of barytes. *Sulphis baryticus.*		
Sulphite of bismuth. *Sulphis bismuthi.*		
Sulphite of lime. *Sulphis calcareus.*		
Sulphite of cobalt. *Sulphis cobalti.*		
Sulphite of copper. *Sulphis cupri.*		
Sulphite of tin. *Sulphis stanni.*		
Sulphite of iron. *Sulphis ferri.*		
Sulphite of magnesia. *Sulphis magnesiæ.*		
Sulphite of manganese. *Sulphis magnesii.*		
Sulphite of mercury. *Sulphis hydrargyri.*		
Sulphite of molybdena. *Sulphis molybdena.*		
Sulphite of nickel. *Sulphis niccoli.*		

New Names.	S	Old Names.
Sulphite of gold. *Sulphis auri.*		
Sulphite of platina. *Sulphis platini.*		
Sulphite of lead. *Sulphis plumbi.*		
Sulphite of potash. *Sulphis potassæ.*		*Sulphureous salt of Stahl.*
Sulphite of soda. *Sulphis sodæ.*		
Sulphite of tungsten. *Sulphis tunsteni.*		
Sulphite of zinc. *Sulphis zinci.*		
Sulphur. *Sulphur.*		*Sulphur.*
Sulphur sublimated. *Sulphur sublimatum.*		*Flowers of sulphur.*
Sulphures, alkaline. *Sulphureta alkalina.*		*Alkaline liver of sulphur.* *Alkaline hepars.*
Sulphure of alumine. *Sulphuretum aluminæ.*		
Sulphure, ammoniacal. *Sulphuretum ammoniacale.*		*Fuming liquor of Boyle.* *Volatile alkaline liver of sulphur.*
Sulphure of antimony. *Sulphuretum stibii.*		*Antimony.*
Sulphure, native, of antimony. *Sulphuretum stibii nativum.*		*Ore of antimony.*
Sulphure of silver. *Sulphuretum argenti.*		*Blanckmal.*
Sulphure of barytes. *Sulphuretum barytæ.*		*Barotic liver of sulphur.*
Sulphure of bismuth. *Sulphuretum bismuthi.*		

New Names.	S	Old Names.
Sulphure, calcareous. *Sulphuretum calcareum.*		*Calcareous liver of ſulphur.*
Sulphure of cobalt. *Sulphureum cobalti.*		
Sulphure of copper. *Sulphuretum cupri.*		*Pyrites of copper.*
Sulphure of tin. *Sulphuretum ſtanni.*		
Sulphure of iron. *Sulphuretum ferri.*		*Martial pyrites.*
Sulphure of fixed oils. *Sulphuretum olei fixi.*		*Balſam of ſulphur.*
Sulphure of volatile oil. *Sulphuretum olei volatilis.*		*Balſam of ſulphur.*
Sulphure of magneſia. *Sulphuretum magneſiæ.*		*Liver of magneſian ſulphur.*
Sulphure of manganeſe. *Sulphuretum magneſii.*		
Sulphure of mercury. *Sulphuretum hydrargyri.*		
Sulphures, metallic. *Sulphureta metallica*		*Combinations of ſulphur with metals.*
Sulphure of molybdena. *Sulphuretum molybdeni.*		
Sulphure of nickel. *Sulphuretum niccoli.*		
Sulphure of gold. *Sulphuretum auri.*		
Sulphure of platina. *Sulphuretum platini.*		
Sulphure of lead. *Sulphuretum plumbi.*		
Sulphure of potaſh. *Sulphuretum potaſſæ.*		*Liver of ſulphur with a baſe of vegetable alkali.*

New Names.	Old Names.
	S
Sulphure, antimoniated, of potash. *Sulphuretum potassæ stibiatum.*	*Antimoniated liver of sulphur.*
Sulphure of soda. *Sulphuretum sodæ.*	*Liver of sulphur with a base of fixed mineral alkali.*
Sulphure, ammoniated, of soda. *Sulphuretum sodæ stibiatum.*	*Ammoniated liver of sulphur.*
Sulphure of tungsten. *Sulphuretum tunsteni.*	
Sulphure of zinc. *Sulphuretum zinci.*	*Blende*, or *false galena.*
Sulphures, earthy. *Sulphureta terrea.*	*Earthy livers of sulphur.* *Earthy hepars.*
	T
Tartar. *Tartarus.*	*Crude Tartar.*
Tartarite. *Tartaris, tis. f. m.*	Salt formed by the combination of the tartareous acid with different bases.
Tartarite, acidulous, of potash. Tartareous acidulum of potash. *Tartaris acidulus potassæ.*	*Tartar.* *Cream of tartar.* *Crystals of tartar.*
Tartarite of alumine. *Tartaris aluminosus.*	
Tartarite of ammoniac. *Tartaris ammoniacalis.*	*Ammoniacal tartar.* *Tartareous ammoniacal salt.*
Tartarite of antimony. *Tartaris stibii.*	

New Names.	T	Old Names.
Tartarite of ſilver. *Tartaris argenti.*		
Tartarite of arſenic. *Tartaris arſenicalis.*		
Tartarite of barytes. *Tartaris baryticus.*		
Tartarite of biſmuth. *Tartaris biſmuthi.*		
Tartarite of lime. *Tartaris calcareus.*		*Calcareous tartar.*
Tartarite of cobalt. *Tartaris cobalti.*		
Tartarite of copper. *Tartaris cupri.*		
Tartarite of tin. *Tartaris ſtanni.*		
Tartarite of iron. *Tartaris ferri.*		
Tartarite of magneſia. *Tartaris magneſiæ.*		
Tartarite of manganeſe. *Tartaris magneſii.*		
Tartarite of mercury. *Tartaris hydrargyri.*		
Tartarite of molybdena. *Tartaris molybdeni.*		
Tartarite of nickel. *Tartaris niccoli.*		
Tartarite of gold. *Tartaris auri.*		
Tartarite of platina. *Tartaris platini.*		

New Names.	T	Old Names.
Tartarite of lead. *Tartaris plumbi.*		*Saturnine tartar.*
Tartarite of potash. *Tartaris potassæ.*		*Soluble tartar.* *Tartarized tartar.* *Tartar of potash.* *Vegetable salt.*
Tartarite, ammoniated, of potash. *Tartaris potassæ stibiatus.*		*Stibiated tartar.* *Tartar emetic.* *Ammoniated tartar.* *Emetic.*
Tartarite, ferruginous, of potash. *Tartaris potassae ferrugineus.*		*Chalybeated tartar.* *Soluble martial tartar.*
Tartarite of potash, sur-compounded of antimony. *Tartaris potassæ stibiatus.*		*Tartarized tartar, containing antimony.*
Tartarite of soda. *Tartaris sodæ.*		*Tartar of soda.* *Polychrest salt of Rochelle.* *Salt of Seignette.*
Tartarite of tungsten. *Tartaris tunsteni.*		
Tartarite of zinc. *Tartaris zinci.*		
Tin. *Stannum.*		*Tin.* *Jupiter.*
Tunstate. *Tunstas, tis. f. m.*		Salt formed by the combination of the tunstic acid with different bases. This genus of salt has no name in the old Nomenclature.
Tunstate of alumine *Tunstas aluminosus.*		
Tunstate of ammoniac. *Tunstas ammoniacalis.*		
Tunstate of antimony. *Tunstas stibii.*		

New Names.	T	Old Names.
Tunſtate of ſilver. *Tunſtas argenti.*		
Tunſtate of arſenic. *Tunſtas arſenicalis.*		
Tunſtate of barytes. *Tunſtas baryticus.*		
Tunſtate of biſmuth. *Tunſtas biſmuthi.*		
Tunſtate of lime. *Tunſtas calcareus.*		
Tunſtate of cobalt. *Tunſtas cobalti.*		
Tunſtate of copper. *Tunſtas cupri.*		
Tunſtate of tin. *Tunſtas ſtanni.*		
Tunſtate of iron. *Tunſtas ferri.*		
Tunſtate of magneſia. *Tunſtas magneſiæ.*		
Tunſtate of manganeſe. *Tunſtas magneſii.*		
Tunſtate of mercury. *Tunſtas hydrargyri.*		
Tunſtate of molybdena. *Tunſtas molybdeni.*		
Tunſtate of nickel. *Tunſtas niccoli.*		
Tunſtate of gold. *Tunſtas auri.*		
Tunſtate of platina. *Tunſtas platini.*		
Tunſtate of lead. *Tunſtas plumbi.*		

New Names	T	Old Names.
Tunſtate of potaſh. *Tunſtas potaſſæ.*		
Tunſtate of ſoda. *Tunſtas ſodæ.*		
Tunſtate of tungſten. *Tunſtas tunſteni.*		
Tunſtate of zinc. *Tunſtas zinci.*		

W

Water.	*Water.*
Water, lime.	*Lime-water.*
Water, diſtilled.	*Diſtilled water.*
Waters impregnated with carbonic acid.	*Acidulous waters.* *Gazeous waters.*
Waters, ſulphurated.	*Hepatic waters.*

Z

Zinc.

FINIS.